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# ORIGINAL ARTICLES

## THE TREATMENT OF VISCERAL PTOSIS BY RESPIRATORY EXERCISES.*

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Sometimes, ptosis of the viscera is an acquired condition consequent upon a cause only occasionally operative. Such cause may be an injury, constriction by corset or waistband, spinal curvature, a tumor, pregnancy, ascites, pericarditis, pleurisy, peritoneal (especially omental) adhesions,[1] emaciation, exhaustion after acute disease, or the weakness and atrophy of the abdominal muscles which disuse sometimes entails from the beginning of middle age.[2] In the great majority of cases, however, ptosis of the viscera is the incidental expression of a constitutional state depending perhaps upon congenital defect,[3] persistence of or reversion to an embryonic type,[4] or individual failure to complete the anatomic evolution demanded by man's erect attitude.[5] Whatever the ultimate etiology, sagging of one or more abdominal viscera has generally been considered the salient feature of the disease.

What are the natural supports of these viscera? Some, in conformity with observations by Scarpa and Hutsche,[6] believe the peritoneal reduplications or so-called ligaments to be alone sufficient to hold the abdominal organs in their places. Most writers (Monteuuis,[7] Wolkow and Delitzin,[8] Schwerdt,[9] Robinson[2-10] and others) declare in favor of the abdominal walls as performing this function. The viscera rest upon each other as layers of balls completely filling a box would do. As long as the walls of the box do not yield, every ball keeps its position and the

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entire contents are in equilibrium. Within the abdomen, however, the equilibrium is not stationary, but movable. There are only two fixed points—the second, descending or vertical portion of the duodenum, and the segment of the pancreas held in the fork between the celiac axis and the superior mesenteric artery. All others shift with the changing states of emptiness and fullness, the waves of peristalsis, and the ceaseless swing of respiration. In the performance of these movements, the peritoneal folds or so-called ligaments may play the role of guys anchored by the root of the mesentery,* perhaps even of restraining tethers, but only to a trifling extent that of suspensory bands.

Barring exceptional cases of acquired ptosis of the viscera, all others show weakness of the abdominal muscles, often atrophy; stretching of fasciae, and sometimes separation of the recti. A consideration of these anatomic conditions has led very naturally to the widespread adoption of artificial support by plaster straps or a well-fitted binder for the treatment of the derangement. An amelioration of subjective symptoms is unquestionably obtained many times thereby. In isolated instances (Henderson,[11] Le Conte,[12] Einhorn[13]), a return of prolapsed organs to their normal position has been reported as obtained in patients who had worn an abdominal bandage, but who also received other treatment. With these possible exceptions, there is no evidence to indicate that the benefits conferred by external support are the result of an actual raising up of the viscera. On the contrary, there is most direct testimony that such lifting is not accomplished.

In an account of gastroptosis as observed at the Medical Dispensary of the Hospital of the University of Pennsylvania, Steel and Francine[14] state: "In nine of our cases, the stomach was re-examined by inflation after an average interval of fourteen months. During this time, the external support, furnished by an abdominal binder, was constantly applied, and the results of the second examination in each case showed that the stomach was in exactly the same position at the end of the period as it was when the patient first came under observation." In discussing a paper on gastroptosis[15] before the American Medical Association, Türck said: "The abdominal belt does not lift the stomach at all, as has been shown by a careful examination with the gyromele in connection with the x rays." By means of suspensions of bismuth subnitrate, Worden[16] obtained radiographs of the prolapsed stomach. Although in "Case 5, extreme prolapse with dilation, low pylorus and kinking at the pyloric portion, an abdominal support of adhesive plaster relieved the symptoms of poor motility," yet "a picture taken with this support on

*The radix mesenterica is formed by the roots of the celiac axis and the superior mesenteric artery, together with a collection of strong connective tissue coming from the aortic sheath and diaphragmatic crura. Strands of lymphatics and nerves accompany the blood vessels. Extensions radiate into the outer coat of the oesophagus, the gastrophepatic omentum, the mesentery of the small bowel, and the hilum of the kidneys. A fibro-muscular band (musculus suspensorius duodenior muscle of Treitz) passes from one or the other crus of the diaphragm to the junction of duodenum and jejunum.

showed the stomach little, if any, elevated." In an article dealing with the treatment of gastroptosis, Francine[17] remarks: "Often and often, the patient on wearing a belt was relieved of the symptoms of dragging, weight, backache and fatigue, but the stomach while somewhat elevated by the belt still remained as much as an inch or two below the umbilicus."

Since the abdominal bandage does not rectify the descent of the stomach or other organs, to what can be attributed the alleviation which it effects often immediately? The benefit undoubtedly results from a restoration of intra-abdominal pressure in greater or lesser degree. An intact intra-abdominal pressure is of great physiologic moment. Peristalsis must be hindered if the pressure within the hollow viscera fails to be balanced or exceeded by that without. A tendency to dilatation from a purely physical cause will be added to that due to any existing weakness of their walls. The sympathetic ganglia acting under conditions of abnormal pressure will manifest erratic reflexes. The pulsations of the aorta and its larger branches relieved from the usual counterpressure, force themselves upon consciousness by way of nerves dragged into hypersensitiveness. The vitally important relationship of the vast area of sphlanchnic vessels to the rest of the vascular system must suffer derangement of its delicate adjustments if intra-abdominal pressure is permanently low. The flow of venous blood, of lymph and chyle, and bile is also interfered with. The element of lowered intra-abdominal pressure is alone sufficient to account for most of the symptoms of neurasthenia and nutritive failure presented by so many of those afflicted with sphlanchnoptosis. Yet few writers on the subject, seem to appreciate the significance of this condition. Schwerdt[9] reasons that lowered intra-abdominal pressure entails gaseous distention of the stomach and bowels, and makes it more difficult for the gall-bladder, chyle channels and veins to empty themselves. He declares: "To raise intra-abdominal tension is the most important point in the therapy of enteroptosis." Visscher[18] says: "Enteroptosis in any of its forms once established, is perpetuated by the continuance of its essentials: inanition, low intra-abdominal pressure and consequent venous stasis. Türck[15] remarks: "Disturbance of the sphlanchnic circulation is undoubtedly an important factor in the production as well as the result of gastroptosis. * * * The improved condition after the application of the abdominal support is due to the increase in the intra-abdominal pressure overcoming the sphlanchnic congestion." Speaking of low pressure, Van Valzah and Nisbet[19] state: "This is one of the causes of the inefficient peristalsis and of the stasis of the contents of the digestive tube. But persistent low tension means venous and particularly lymph stasis or congestion. This abdominal stagnation is pernicious in its influence on the nutrition of the abdominal and pelvic organs, and on digestion, absorption and assimilation." The foregoing are the only extracts bearing on the topic which the writer has been able to collect.

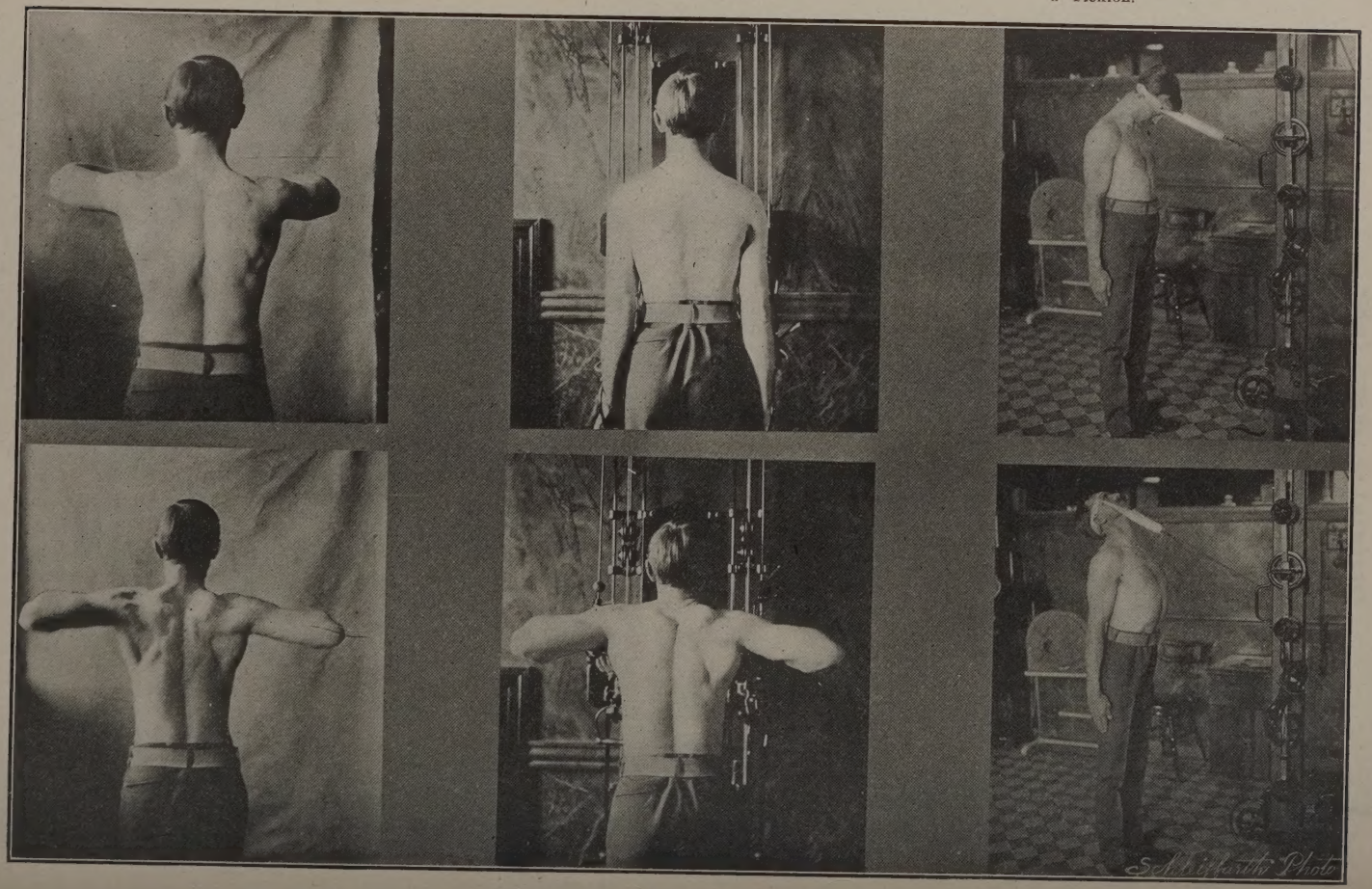
## TO EXERCISE CERTAIN ACCESSORY MUSCLES OF INSPIRATION.

### Positions at End of Expiration.

*1* Drawing Back Shoulders.
*a* Shoulder Blades Separated.

*2* Raising Shoulders.
*a* Shoulders Dropped.

*3* Flexion and Extension of Head.
*a* Flexion.




*b* Shoulder Blades Approximated.

### Positions at End of Inspiration.

*b* Shoulders Raised.

*b* Extension.

Plates by Sanders Engraving Co. Prints by Hoke Engraving Plate Co.

In some aggravated cases of visceral ptosis, particularly where advanced age or atrophy preclude the hope of tissue regeneration, a suitable belt may be an absolute necessity for maintaining something like normal pressure within the abdomen. In more favorable cases, it may serve at times as a useful expedient, affording comfort and temporary protection against further strain. But unless the *natural* abdominal supports are developed by exercise, and the belt laid aside as soon as possible, absence of function will simply increase the weakness that ought to be combated. "Once worn, the patient can rarely give up a belt," exclaims Francine.[20] This is true enough, if the belt be relied upon as a curative, instead of a purely palliative measure.

Now, it is quite common to meet with the advice that the abdominal muscles be strengthened when treating splanchnoptosis. The utility of the douche, of massage and electricity for the purpose is usually mentioned. Occasionally, a paragraph may even be devoted to describing a few exercises credited with having this effect. But the advantage of training the abdominal muscles in their most important function appears to have been overlooked entirely. The abdominal muscles are primarily muscles of respiration, their actions in bringing about movements of the trunk being in a certain sense accidental and subsidiary. Their function, moreover, is both inspiratory and expiratory. The part played by them in expiration, especially in deep expiration, is too generally understood to require description; but their role as inspiratory agents, may need some explanation. During the inspiratory descent of the diaphragm, the tension of the abdominal muscles prevents downward displacement of the viscera located in the upper abdomen. Instead, these viscera are pressed laterally against the lower ribs, keeping them from being drawn inward by the contracting diaphragm whose excursions would become much less effective if its costal attachments were not thus fixed. The lower circumference of the thorax is not merely maintained, but actually enlarged. When the resistance of the abdominal muscles is sufficiently strong, the downward pressure of the diaphragm, assisted by the pull of the intercostales externi, intercartilaginei and levatores costarum may literally lift the thorax up and as it were off from the abdominal viscera, producing a pronounced type of thoracic breathing. The muscular wall of the abdomen is completed posteriorly by the quadratus lumborum which might be considered as a continuation backward of the transversalis. With reference to the last rib and the abdominal contents, the quadratus lumborum has the same in- and expiratory function as the other muscles of the abdomen. It is suggestive that Aufrecht[21] found the quadratus lumborum "remarkably yielding and easily indented" when nephroptosis existed, and that "not rarely the right quadratus lumborum can be shown to be more yielding than the left in the far more frequent cases of right-sided nephroptosis."

# TO ENLARGE AND MOBILIZE THE THORAX.

4

*a* Position at End of Expiration. *b* Midway. *c* At End of Inspiration.

6

*a* Position at End of Expiration.

5

*a* Position at End of Expiration. *b* Midway. *c* At End of Inspiration.

6

*b* Position at End of Inspiration.

Plates by Sauder Engraving Co. Prints by Hoke Engraving Plate Co.

The foregoing considerations make it apparent that weakness of the supporting apparatus of the abdominal viscera is weakness of a breathing apparatus. This point of view becomes of the greatest practical consequence when the thorax and diaphragm are studied in relation to sphlanchnoptosis. In the constitutional variety of this disease, the thorax deviates markedly from the normal type. The shape is that of the so-called "paralytic thorax," viz., long, narrow, flat and sunken. The intercostal spaces are widened above, but not below. The first pair of ribs is placed obliquely instead of horizontally, frequently even being bent downward at the junction of neck and shaft. The tenth rib nearly always either is attached very loosely to the ninth, or terminates free like the eleventh and twelfth.[3] The lower ribs slant much more than usual. The subcostal or epigastric angle, formed by the costal cartilages of the seventh and eighth ribs with each other, becomes acute instead of approaching a right angle, and may fall to a value of 45° or less. The phrenico-lumbar angle exceeds the normal average of 30° for mid-position of the diaphragm, to attain a value of as high as 90° in extreme instances.[22] Arthur Keith[23] seems to have been the first to assert that "downward displacement of the diaphragm is an essential feature of all cases of ptosis of the viscera." Robinson[2] expresses the same opinion. Keith found also that "in cases of general enteroptosis, the muscular fasciculi of the diaphragm measure on an average only 2½ inches, against 3½ to 4 inches in a condition of health."

To estimate fully the influence such abnormalities must have upon the position of the viscera within the abdominal cavity, it is necessary to keep in mind that the upper part of the latter should occupy about half of the thorax, and that the stomach, spleen, liver and kidneys are firmly attached to the diaphragm. A rational therapy of sphlanchnoptosis demands that attention be not narrowly centered on the abdomen, but be directed toward utilizing the anatomic, physiologic and pathologic facts presented. Accordingly, the treatment of visceral ptosis should include:

1. Development of the abdominal muscles in general, and in the direction of adding to their strength as auxiliary agents of inspiration in particular.
2. Increase of pressure and furtherance of the circulation of blood and lymph within the abdomen.
3. Enlargement of the thorax, especially of its lower half.
4. Development of the diaphragm and elevation of its domes.

This is no easy task. Perseverance is the first requisite. With it and time, even those past the plastic period of life may still achieve satisfactory results. But when age has stiffened the thorax and joints, or when extensive degeneration of muscle and connective tissue has taken place, little can be accomplished of course.

The most difficult part of our therapeutic endeavor will be to lift the domes of the diaphragm. There is at our disposal for this purpose, the upward suction of negative intra-thoracic pressure. This could be

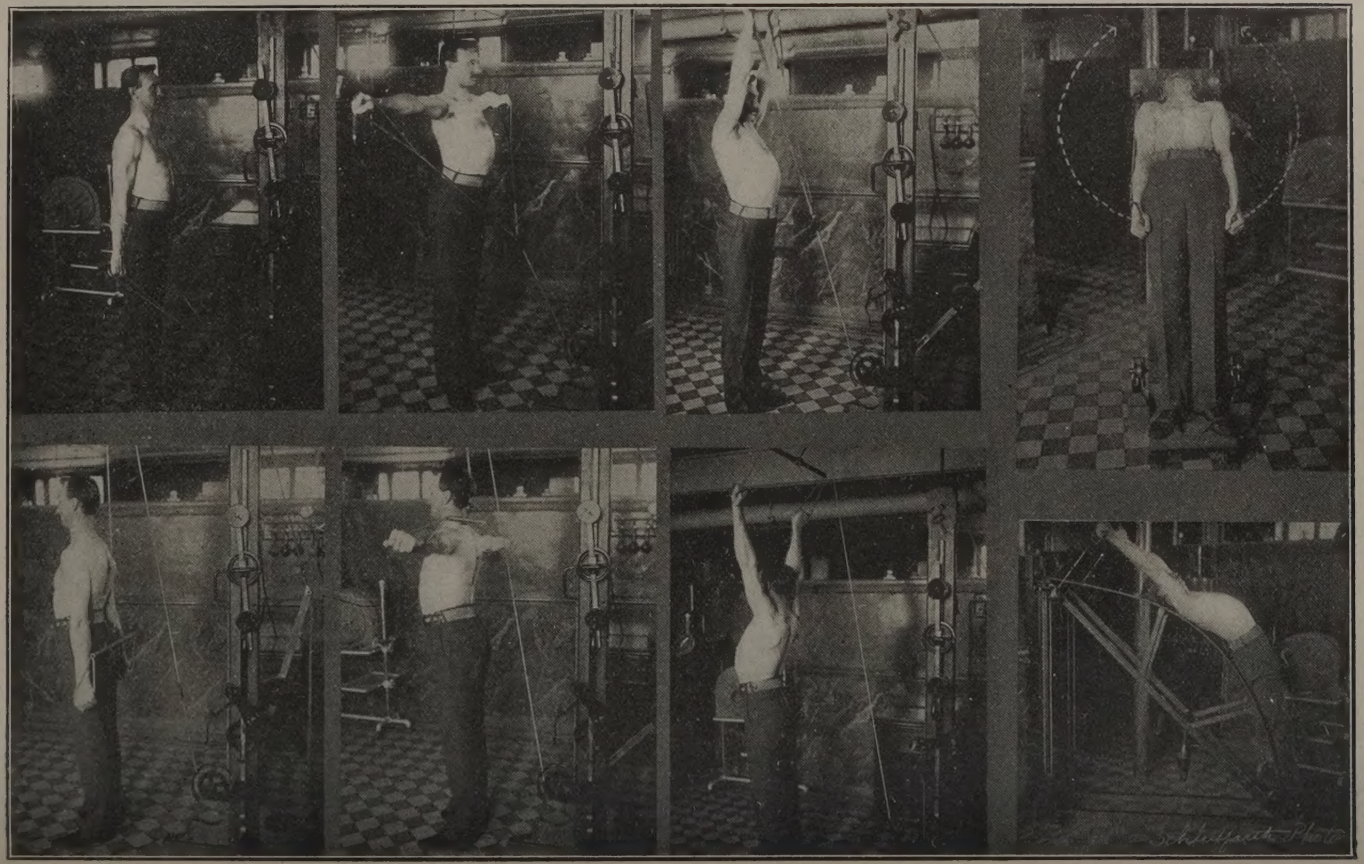
# TO ENLARGE AND MOBILIZE THE THORAX.

7

*a* Position at End of Expiration. *b* Midway. *c* At End of Inspiration.

9

*a* Position at End of Expiration



8

*a* Position at End of Expiration. *b* Midway. *c* At End of Inspiration.

9

*b* Position at End of Inspiration.

Plates by Sanders Engraving Co. Prints by Hoke Engraving Plate co.

increased by breathing rarefied air, or through a valve arranged to obstruct inspiration. It will be sufficiently effective, however, and much more practical to depend simply upon the aspiration of forced inspiration. In health, this amounts to about—40 mm. Hg (Quincke; Leyden), or almost four times the lowest estimate for ordinary inspiration. If expiration be kept shallow, the pressure at its end will not rise above—3 mm. Since the abdomen is a closed cavity, and the organs in its upper part moreover are bound to the diaphragm, every ascent of this muscle is certain to draw up the abdominal viscera. That the amount of this lifting is not to be despised is evident from the fact that in health, a forced inspiration causes the edge of the liver to rise about two inches. These same forced inspirations will assist likewise in fulfilling another of the therapeutic indications, viz., enlargement of the lower thorax. According to the degree of inspiration, the circumference of the diaphragm increases one to four inches (Keith). In a healthy man, a forced inspiration adds from one-twelfth to one-seventh to his girth at a point a little below the ensiform cartilage (Valentin). Certain special exercises will give further help in this direction. The methodical practice of deep breathing, no matter how, is sure to result in some increase in chest capacity. A general enlargement and mobilization of the thorax is secured best, however, by exercises which couple action of the accessory muscles of inspiration with regular and full intake and outflow of breath. Muscles belonging to this category, and which are available practically for the purpose are those which may lift the thorax (sterno-cleido-mastoid); raise or fix the ribs (subclavius, cervicales descendens, pectorales, latissimus dorsi, serrati, scaleni and quadratus lumborum); fix the shoulder (trapezius, rhomboideus, levator anguli scapulae); or straighten and stiffen the spine (erector spinae, multifidus spinae, etc.).

Development of the diaphragm is attained by deep abdominal breathing which also strengthens the transversales. Incidentally, the lesser or gastro-hepatic omentum will be alternately relaxed and stretched as the liver and stomach swing forward on each other and again fall back with the movements of the diaphragm, a sort of passive exercise likely to improve the nutrition of this peritoneal tether and vessel-bearing bridge. On the other hand, training the abdominal muscles in their inspiratory work necessitates the practice of a purely costal type of respiration. This object is promoted also by deeply inspiring while a movement is executed by means of the abdominal muscles. Besides rendering the services referred to, the cultivation of respiratory activity as outlined, possesses the desirable influence of aiding the circulation of both blood and lymph within the abdomen. Thoracic aspiration acts like a suction pump upon the inferior vena cava and the thoracic duct. Every time the diaphragm descends, the contents of the thin-walled veins and lymphatics are squeezed onward, backflow being prevented by valves in the vessels of the lower limbs. But in order that

## TO ENLARGE AND MOBILIZE THE THORAX.

Positions at End of Expiration.

10 11 12 13

10 11 12 13

Positions at End of Inspiration.

Plates by Sanders Engraving Co. Prints by Hoke Engraving Plate Co.

this may take place, it is necessary to keep the abdominal walls from yielding either by muscular contraction or by pressure applied outside. The development of the abdominal muscles with a view to their re-establishment as the natural means of maintaining pressure and of supporting the viscera within the abdomen requires certain exercises for the trunk and lower limbs. These constitute an essential complement of what might be termed the respiratory treatment of splanchnoptosis. An explanation of their purpose and even the description of a few may be found in various treatises on the disease. For this reason, these particular exercises will not be dealt with further in this paper which is limited to the consideration of specific principles of treatment almost, if not wholly, unknown.

A diligent search through the available literature directly or indirectly bearing on the subject of visceral ptosis failed to disclose an expression of views in any way similar to those here presented except in the three following instances. Taylor[24] recommends: "Above all, specific, definitely directed voluntary movements, educative in character, of respiration, thoracic action, and especially of the abdominal muscles," and says elsewhere (p. 136): "Systematic breathing exercises, even though they be clumsily and partially employed, produce gratifying results. When these are consistently taught and faithfully practiced, this measure alone will establish a degree of invigoration of the whole economy which will satisfy the most exacting." Mathes[25] comes nearer the point with the statement that "the greatest weight is to be placed upon systematic gymnastics which should aim especially at developing and strengthening the thorax;" and that "gymnastic exercises for strengthening the thorax and the abdominal walls meet causal indications." Smith,[26] after remarking that it seems to him that Mathes has not exaggerated the importance of chest development, says: "If the patient is young and the thorax more or less mobile, I have often given a system of breathing exercises with the idea of increasing the lung capacity and the size of the upper abdomen." None of the authors quoted, nor any others so far as could be ascertained, point out that a number of the chief anomalies present in sphlanchnoptosis logically call for correction by breathing exercises. Neither has anyone formulated a definite scheme of gymnastic treatment deduced from the pathology of the disease and the physiology of respiration. It must not be inferred that the method advocated is intended to supersede such other physical, dietetic or even medicinal remedies as are indicated and have been proved beneficial. This applies particularly to a rest-cure when there exists great emaciation or general break-down. The claim is made, however, that this method is not only compatible with, but essential to any rational plan of treating the visceral ptoses.

The photographs presented on the succeeding pages illustrate exercises for the practical application of the principles set forth. They were made by my friend, Dr. Charles W. Schleiffarth, whose

18

**To Increase Capacity of Upper Abdomen.**

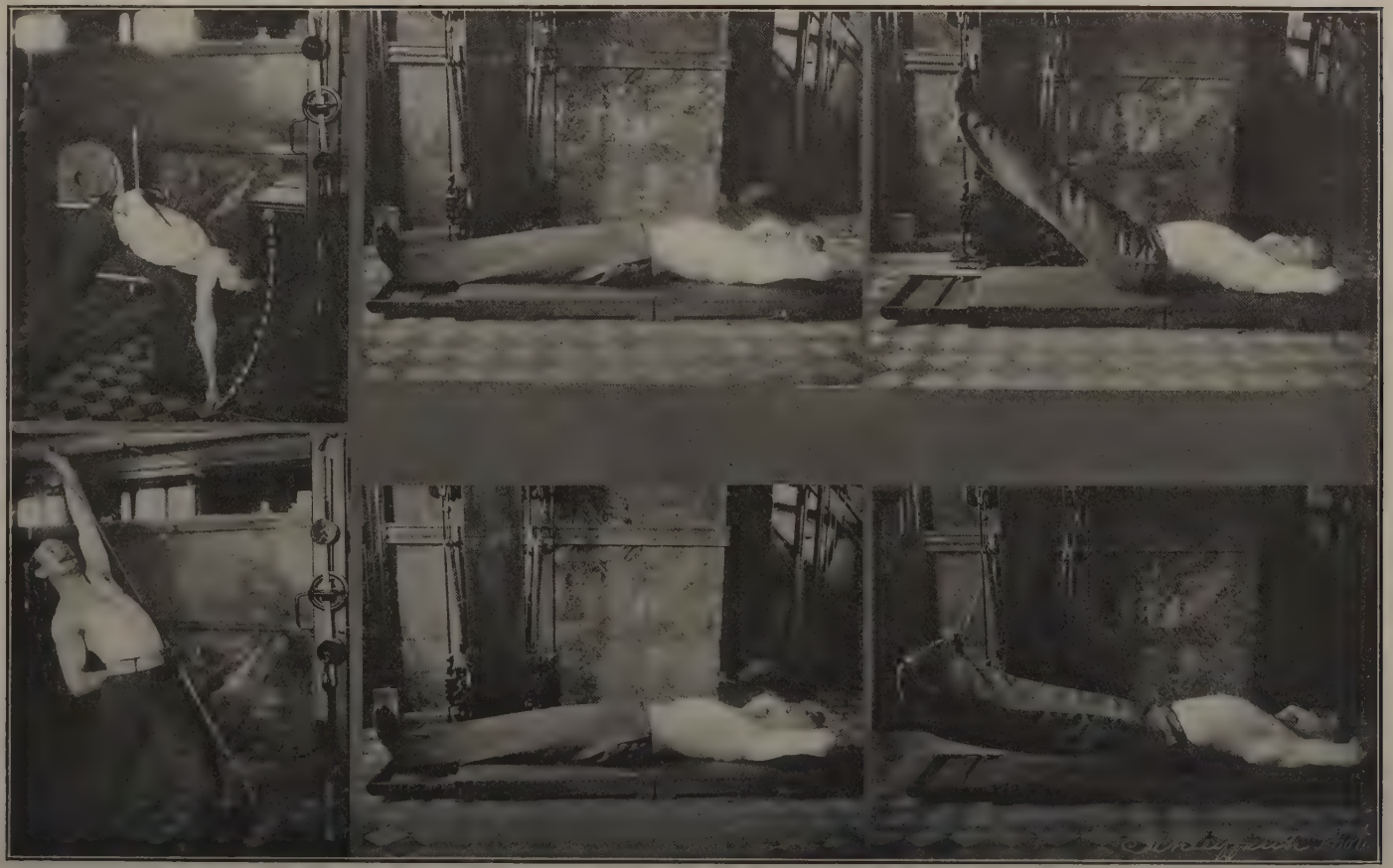
*a* Position at End of Expiration.

19

**To Develop Inspiratory Tension of Abdominal Muscles.**

*a* Position at Rest at End of Expiration.

*b* Position at End of Movement and of Inspiration.



Plates by Sanders Engraving Co. Prints by Hake Engraving Plate Co.

18

**To Increase Capacity of Upper Abdomen.**

*b* Position at End of Inspiration.

20

**To Develop Inspiratory Tension of Abdominal Muscles.**

*a* Position at Rest at End of Expiration.

*b.* Position at End of Movement and of Inspiration.

medical knowledge, no less than his skill in photography contributed greatly towards bringing out so plainly the features which were to be shown. The characteristic poses testify to the muscular control as well as the interest and patience of Mr. F. C. E. Schneider, Instructor in Physical Culture in the St. Louis public schools. The writer takes this occasion to express his grateful appreciation of the services rendered him by these two gentlemen. No attempt has been made to picture each and every one of the exercises which the writer is in the habit of prescribing, but only those which are fundamental, and enough others to serve as examples. Exercises designed in particular for strengthening the abdominal walls, although an indispensable part of the gymnastic treatment, are not shown for the reason already mentioned. To get results, the correct execution of each exercise must be taught the patient, and maintained by strict supervision. It is often desirable to intensify action or to provide variety by duplicating an exercise with some other of like character, but different form. The best effects can hardly be obtained without some kind of graduated resistance. Exercises performed with apparatus at the writer's establishment are supplemented by others for home use. Patients in bed can be prepared for subsequent more energetic procedures by a graded course of passive and manually resisted movements.

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14

**To Enlarge and Mobilize the Thorax.**

Alternately Right and Left with Inspiration and Expiration.

16

**To Develop Diaphragm, Increase Intra-abdominal Pressure and Favor Circulation.**

*a* Position at End of Abdominal Inspiration with Protrusion against Resistance (Weight).

17

**To Elevate Diaphragm.**

*a* Position at End of Deepest Possible Thoracic Inspiration.

Plates by Sanders Engraving Co. Prints by Hoke Engraving Plate Co.

15

**To Increase Capacity of Upper Abdomen**

Lower Thoracic Inspiration and Expiration. (Man-

16

*b* Position at End of Abdominal Expiration with Retraction under Pressure (Weight).

7

*b* Position at End of Shallow Expiration.

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DISCUSSION.

Dr. J. M. Allen, Liberty: The Section is to be congratulated on having heard this paper. You will not get these facts in any work on medicine that I know of, although one work touches this matter and that by Eccles, of Manchester, England, who has written a book on gastroptosis. There are several conditions that produce gastroptosis. All neurotic conditions tend to produce it, because the lowered vitality of the vasonervous mechanism permits a relaxation of the tissues. Again, you will find it in neurasthenic women, the reflexes affecting the circulation of the blood in the veins until the amount of blood in the veins and other organs of the abdominal cavity will be one-third more than it would be normally. The arteries of the abdominal cavity are amply protected, as they pass through the muscular coat of the intestines, and the consequence is that venous congestion occurs. In dealing with the condition, I try to treat the ulterior cause. The treatment suggested by Dr. Shattinger is good as far as it goes. I do not ascribe it so much to the condition of the abdominal muscles as he does. Before you can successfully treat a case of gastroptosis you must get at the cause of it.

Dr. B. H. Zwart, Kansas City: The logical reasoning of the essayist must appeal even to those who have not been enthusiastic in the mechanical treatment of these conditions,—conditions in which neurasthenia is a potent and most noticeable element. I have long been interested in the mechanical treatment of ills of this character and I am particularly glad the doctor omitted to mention any therapeutic medicinal treatment of the condition. I believe resisted movement is the treatment par excellence at our command. I trust that the treatment advocated by the essayist will stimulate even those who have been interested in the me-

chanical treatment to further efforts. There is no question but we are drifting further and further away from the medicinal treatment of chronic conditions.

Dr. Robert T. Sloan, Kansas City: I was particularly interested in Dr. Shattinger's paper, as much of his argument was new to me. I am not willing to subscribe to everything he says. I believe, however, that even if there is some fallacy in his reasoning, he does obtain the result by the physical culture exercises, of which these breathing exercises are a part. I look upon splanchnoptosis as a neurosis, due to a general loss of tone, of which lack of muscular tone is but a part, and the lack of tone of the vascular system is perhaps the larger part. The results would be perhaps as good if he would instruct his patients to breathe, *habitually,* a little more deeply than they usually do. It is characteristic of neurasthenics to breathe superficially. They have the capacity for deep breathing but they do not use it. I think no plan of physical culture exercises can quite take the place of the rest treatment in advanced cases.

Dr. C. S. Roberts, Joplin: Ninety per cent. of those present will be benefited by this paper and I belong to that ninety per cent. But there ought to be a word of caution for those of us who will undertake to adopt it, and that is, we should take care not to over-do the thing. I have found from experience that it is very easy to over-do it. Where it is needed most, the least amount of it will do the most good at the start. Therefore, those of us who are inexperienced may carry the exercise too far and thereby get more weakness instead of some strength. The weaker the muscles, the less exercise is required.

Dr. John Punton, Kansas City: The argument Dr. Shattinger presents is a step in the right direction, but he undertakes to do too much. The term neurasthenia, as now used by the majority of physicians, is a badly misused word; it is a neurological waste basket into which are dumped all the conditions the physician does not understand. Neurasthenia is a lack of nerve tone in which the underlying condition is not known. Neurasthenia is a very rare condition and this whole subject is as yet undefined. If it is true that the vast majority of persons suffer from gastroptosis congenitally, then it would seem that neurasthenia, if that is always associated with it, must be a very common disease, while as a matter of fact it is, as I have already said, a very rare condition. I do believe, however, that there are cases that will be greatly benefited by the method outlined by Dr. Shattinger.

Dr. G. W. Robinson, Nevada: I take issue with the doctor in treating these cases too much by exercise. Neurasthenia belongs to the fatigue neuroses, a condition in which there is a loss of tone. The best treatment for such a condition is to put your patient at rest. Your loss of tone is brought about by a lack of nutrition of the nerves and muscles. If you use these exercises you exaggerate the condition. The nerves and muscles will adjust themselves if you attend to nutrition and

elimination. The abdominal binder does the work that the muscles ought to do and we know that if we do the work for a muscle the muscle will not do that work.

Dr. Shattinger, in closing: Some confusion has resulted from the impression which seems to have gotten about that I was dealing with neurasthenia. The paper was intended to deal with ptosis of the abdominal viscera and touched upon neurasthenia only in so far as neurasthenic symptoms are often found in these cases. I do not advocate this treatment for neurasthenia, nor do I advocate it alone for the treatment of abdominal ptosis. When taking a rest cure the patient can be prepared while in bed for subsequent treatment of the kind shown by the photographs. I also tried to treat of the development of the thorax, for other authors refer only to the development of the abdominal muscles. I wanted to bring out what may be termed thoracic treatment of an abdominal disorder. I agree with the doctor who thinks that these patients should be trained to breathe twenty per cent. more deeply than they do habitually, but you have to give them the muscular development to enable them to do it. As to the abdominal binder, Dr. Greer told you that he kept up the use of the straps and his patient got along very well. That was just what I said in my paper; if you begin strapping you will have to keep it up. I do not suppose, however, that in Dr. Greer's case it would be possible to hold up such an enlarged spleen without a binder; nevertheless, the case substantiates the claim that once a binder is used, it must be used permanently. Exercise is developmental and strengthening only when it falls short of exhausting the natural recuperative power of muscular tissue. That is why the exercise must be supervised by the physician. These patients will in their enthusiasm at first over do, and later not do enough, unless controlled and guided by the physician.

# SUITABLE PATIENTS FOR THE MISSOURI STATE SANATORIUM FOR INCIPIENT PULMONARY TUBERCULOSIS.*

BY ORVILLE HARRY BROWN, M. D.

It is a statement which will undoubtedly go uncontradicted, that the founding of the State Sanatorium for Incipient Pulmonary Tuberculosis was purely in the interests of humanity. The law-making bodies of our State, recognizing that a wise selection of cases for the institution would be one of the factors of paramount importance in insuring for society the greatest culmination of benefits to be derived therefrom, distinctly stated in the name bestowed upon the sanatorium that it was for persons with the incipient stage of tuberculosis of the lungs.

Since there is no institution in the State for past-incipient or advanced cases, the interpretation of the meaning of incipient becomes a problem of prime importance. Webster says incipient is "beginning" or "commencing." The incipient stage of a disease according to this definition is the period of implantation of the morbid producing processes. The mere passing of tubercle bacilli into the lungs, the lodging of them there, and their beginning to grow and multiply, does not produce symptoms for a considerable period, and yet strictly speaking this is the incipient stage of this disease. The duration of this period depends on two factors, namely: The virulency of the invading organisms and the resistance of the attacked individual. Since the date of the exposure to the germs is absolutely impossible to locate, and since it is impossible to know either the virulence of the organisms or the resistance of the individual in any particular case, there are no means of locating the truly incipient state in any case. Another interpretation of incipient,—one which is practical,—must be sought.

It would seem to be expedient for us to use the word incipient in connection with recognizable,—*i. e.*, by incipient pulmonary tuberculosis, would be always meant the incipient period of recognizable tuberculosis. Does this definition serve the commonwealth the best possible so far as it is concerned about the sanatorium? We answer unhesitatingly, yes, but we append,—the recognizable cases must be discovered within a comparatively few weeks after they become recognizable, or, otherwise, they must be excluded as being past incipient cases. Another dependent clause perhaps should also be attached to the above, and this should read, that from these cases that are recognized a reasonable number must be convinced that they have tuberculosis, and they must recognize that their condition calls for immediate treatment, and a sufficient

*Read in the Symposium on Tuberculosis, Fifty-first Annual Meeting, Springfield, May, 1908.

number to fill the sanatorium must believe that the most desirable place for them to get this treatment is at the State sanatorium, otherwise the sanatorium will not be filled. Two sad admissions must follow. First, it is a lamentable fact that the average general practitioner does not recognize pulmonary tuberculosis until the disease is well advanced,—and even then sometimes he has doubt about his decision thereover. The second admission is less deplorable, but it must be dealt with. It is, that many people, even though they have been assured by reliable physicians that they have incipient pulmonary tuberculosis, either will not believe it or will not take cognizance of it.

Although uncalled for in this article, it is perhaps advisable to state that the reason that physicians fail to diagnose pulmonary tuberculosis when they should is two fold:—first, they examine the chest superficially, through the clothing often; and second, they have not perfected themselves in the methods of physical and laboratory diagnosis. Snap-shot diagnosis is entirely too prevalent and should in every case be labeled as pernicious.

Since, if either of the two definitions so far given for incipient, were adopted, none, or, at most, very few cases would be sent to the sanatorium, it is necessary to place another interpretation upon the meaning of incipient. Why not say that any case was an incipient one whose initial symptoms,—the date of which can usually be located by a careful inquiry into the history,—does not date back for more than six months. The following example will illustrate a difficulty with this. Two cases exist with practically identical physical findings, so far as can be discerned. One case has been ill only a short time and is going down rapidly; the other has been ill a much longer time and his condition is just about remaining stationary. A difference between the two exists; plainly one has a much better chance for a speedy death than the other, and the other it is to be expected has better chances of recovery when conditions are rectified. This may be due to a markedly virulent type of infecting bacteria in the case with the rapid decline, and a mildly virulent type in the other, or to a much decreased content of the body's protective factors in the former, and a normal or nearly normal amount of the protective factors in the latter, or there may be both an increased virulency of the bacteria, and a decreased bodily resistance in the former, whereas the converse of this may exist in the latter case.

The former case is not, for our purpose, as nearly an incipient case as the latter, even though the latter has been ill much the longer of the two. The duration of the symptoms can clearly not serve as a criterion for incipiency.

The following definition of an incipient case of tuberculosis was propounded at the time of the opening of the sanatorium, and was printed as a part of the instructions to the examining physicians:

"First will be described what is not an incipient case. A past incipient case, is (1) one which may have acute manifestations associated with fever and signs of progress; (2) which has distinct febrile reaction, weakness and other signs of toxemia after doing a small amount of work; (3) which may have an involvement greater than a half of one lobe; (4) which may have marked ulcerative processes with cavity formation; (5) which may have laryngeal tuberculosis, as indicated by prolonged hoarseness; (6) which may have intestinal tuberculosis, with pain and diarrhea; (7) which may have marked loss of weight.

An incipient case will be considered one in which there is no marked impairment of function, either local or constitutional, and in which the localized consolidation is moderate in extent, involving less than half of one lobe, usually with little or no evidence of destruction of tissue or disseminated fibroid deposits; and in which there are no serious complications; and in which there is no rapid loss of weight; and in which the tubercle bacilli may be present or absent."

This definition was modeled very closely after that given by the National Association for the Study and Prevention of Tuberculosis. In order to show the close similarity between the definitions, that of the National Association's follows:

*Incipient.* Slight initial lesion in the form of infiltration limited to the apex of one or both lungs or a small part of one lobe. No tuberculosis complications. Slight or no constitutional symptoms (particularly including gastric or intestinal disturbance or rapid loss of weight). Slight or no elevation of temperature or acceleration of pulse at any time during the twenty-four hours, especially after rest. Expectoration usually small in amount or absent.

*Moderately Advanced.* No marked impairment of function, either local or constitutional. Localized consolidation moderate in extent with little or no evidence of destruction of tissue; or disseminated fibroid deposits. No serious complications.

*Far Advanced.* Marked impairment of function, local and constitutional. Localized consolidation intense; or disseminated areas of softening; or serious complications.

Are the above definitions of incipient pulmonary tuberculosis satisfactory in every respect for our purposes? For various reasons they are not. Perhaps the most important reason of all is that most cases of tuberculosis are not recognized until they are past what these definitions designate as the incipient stage. The definitions are somewhat complicated and many physicians experience more or less difficulty in understanding the meaning that is intended to be conveyed by them. Even if the meaning is perfectly clear to most physicians some will have trouble in arriving at a conclusion as to whether a case does or does not belong in the incipient class.

Many cases that are plainly past incipient cases according to the above definitions, do well under Sanatoria treatment. The Sanatoria records show this. Therefore, it would be wrong to exclude past incipient cases whenever there are not a sufficient number of cases of the incipient class to occupy all the beds.

In the short Sanatorium experience of the writer it seems to him that past incipient cases should be classified as favorable, doubtfully favorable, and unfavorable. When the number of incipient tuberculosis patients will not require all the room, favorable past incipient cases can be received at the Sanatorium in order that none of the beds may go unoccupied. Such an arrangement should doubtless accomplish the greatest good for the greatest number. A moderately advanced case, we will say, can be greatly benefited and put on the road to permanent recovery, in eighteen months. An incipient case, we will say, can receive the same benefit in six months. Three incipient cases can be treated in the same length of time and at the same expense as that required by the past incipient case. It scarcely need be said that the State feels it her duty to care for the largest number possible, and to do for each the best possible. The determining of which of the past incipient cases are favorable cases is nearly as difficult as deciding on which is or is not an incipient case.

The author has some hesitancy in attempting to set up a dividing point between favorable and doubtfully favorable cases. There are, however, several points which are very evident.

Point one has to do with the extent of the disease. Is there marked consolidation and ulceration? Is there extensive breaking down and softening? Are the respiratory sounds greatly altered from normal? Are there evidences of extra pulmonary involvement? Suffice it to say that other factors being equal the greater the extension of the disease the more serious the condition.

Point two has to do with the findings of a general examination. A patient who is extremely thin or weak or sallow, or anemic or cyanotic or dyspneic, or who has evidence of a serious pathological heart or kidney condition, or who has tuberculous glands or fistulæ, or who has other serious complications, should be very carefully inspected before it is decided that he is a suitable case for the Sanatorium. As a rule any complications should prevent the sending of a case to the Sanatorium until the condition is removed.

Point three has to do with the condition of the nervous system of the patient. Too much stress will scarcely be attached to this. It has been repeatedly observed that the degree of contentment manifested by the patient while taking the cure is closely paralleled by the rapidity of his advancement. A patient that is illy satisfied, irritable and homesick has a rough and rocky road of recuperation to travel.

(a) *Homesickness.* Some persons can scarcely stay from home and friends in unusual surroundings and not become homesick even when

well and it is worse when ill. It is better if a patient has been accustomed to being away from home.

(b) *Irritableness.* Patients in sanatoria must be able to put up good naturedly with a reasonable amount of things that to them do not seem right. It should be held in mind that even at one's home events sometimes go crosswise. The patient should give a history of being able to get along with these little trying affairs, without suffering a badly ruffled temper. For some people the meals are never quite right; things are too hot or too cold; the beds are never just satisfactory; the neighbors are either too noisy or too quiet; the weather is too this or too that; complaining patients are unsatisfactory because they are disagreeable to have around and because their dispositions stand in the way of their getting well, and they frequently instill a spirit of discontent into others.

(c) *Hypochondria.* Some patients wake up every few mornings with new symptoms; they have trouble with the stomach, or the liver, or the heart, or there's a pain here or a pain there. Others will worry and fret and possibly cry for hours if their temperature jumps a little above normal after having remained at normal for some time. There is no use to dwell on hypochondria as the annoying features of it are thoroughly familiar to physicians. The supreme significance of it in tuberculosis demands emphasis however. The presence of an extensive non-detachable hypochondria in a patient may be sufficient to render an otherwise favorable case unfavorable.

(d) *Mental employment.* The ability of a patient to be entertained or to entertain himself when his body must be in more or less complete repose is supremely important. It would seem that reading would be the chief and best employment, and so it is, for those patients that enjoy it, but the writer has encountered a number of patients who cannot get interested in reading. Lady patients can often, during convalescence, be allowed to do fancy work, but occasionally a patient cannot read, cannot do fancy work, cannot sit or be still, and must do something. Such a one has shoals before him or her on the return to health, and will frequently tax the inventive genius of the nurse and physician-in-charge to find something for such an individual to do. This factor, however, is usually not so difficult to cope with as most of the others mentioned.

(e) *Neurasthenia.* Most tuberculosis patients have a higher or lower grade of neurasthenia. A severe type of neurasthenia complicating tuberculosis may be a paramount factor in preventing the recovery from the tuberculosis. The treatment of neurasthenia however is the same as that of tuberculosis, and when both are of a mild type, unless there are other impeding elements, the convalescence from the consumption will not be greatly hindered by the neurasthenia. A history of neurasthenia should be taken into consideration in determining the favorability of the recovery of any particular case.

Point four is concerning the virulency of the disease. As previously stated the rapidity of the extension of the disease may depend on the virulence of the bacteria or upon the resistance of the individual. Except by animal experimentation there is no reasonably sure way of ascertaining this. It is of little or no value, however, to know, in an individual in whom the disease is rapidly spreading, whether a virulent strain of bacteria or whether an inferior resistance of the individual is responsible for the rapid spreading. It is enough to know that the disease is advancing rapidly.

Point five has to do with the physical constitution of the patient. His resistance, evidently is or has been below normal or otherwise he would not now have the developing infection. The problem to decide, is, how far from the immune point does the individual stand? Somewhere in the existence of the individual has there been something at fault,—or possibly we should add the fault may have been with the ancestry. Is there a taint of moral or physical weakness in the ancestry? If so, this may cause us to think that the patient may have had an inherited weakness. Has the individual lived a life of moderation, reasonable in his working, reasonable in his playing, plentiful in his sleeping; or has he been an indefatigable worker, stingy in his recreation and in his rest; or has he led a life of dissipation, going to excesses in so called pleasures, working and resting only when he was not able, or when he was not availed of the means to satisfy his natural,—or perhaps it is only habitual,—trend? Does the individual give a history of prolonged and frequent serious illnesses? Has he had scarlet fever, rheumatism, pneumonia, typhoid fever, etc., and in such case was the convalescence rapid and unbroken? Has he been subject to colds and influenza, which were difficult for him to throw off? It is only by a consideration of such points as these that the resistance of an individual to disease can be in any measure ascertained. The question of immunity and protection is at present receiving considerable attention, but we have no means yet of accurately measuring to see if any certain individual comes up to the standard. The examiner should take all of this into consideration, however, in deciding whether any particular past incipient case is or is not favorable for the benefits of sanatorium treatment.

Point six has to do with the patient's ability to take nutrition. Some patients are parsimonious in their likes, resolute in their distastes, quavering in their attempts to follow orders about their eating, and hence are likely to have trouble to build up properly in weight. As the question of the treatment of tuberculosis is very largely one of getting the proper weight and of keeping it, the question of one's ability to take nutrition is a particularly important one. As the stomach is very likely to suffer minor derangements in tuberculosis, a history of previous chronic stomach complaint may be of extreme significance. This is a very important point to consider, when making a prognosis in tuberculosis.

Point seven has to do with a test. When an examiner is not sure about the classifying of a case, he should make a test case. He should get instructions from the authorities at the sanatorium as to how to care for the patient; how to have him live,—in regard to his sleeping, eating, resting, exercising, etc. If sufficient progress can be obtained by the procedure to be outlined, the evidence is that the patient is a favorable case. The degree of the success will largly depend upon the physician, the patient and his surroundings.

A careful consideration of the above points should be of some advantage in bringing one to a conclusion as to whether any particular past incipient case is or is not likely to be a favorable case for the benefits of sanatorium treatment.

*Summary.* The definition of incipiency is arbitrary. That adopted by the National Association for the Study and Prevention of Tuberculosis is not entirely practical at present, owing to the fact that most cases of tuberculosis are not recognized until they are in the past incipient stage. This is, indeed, a lamentable admission. If only cases that conform to this definition of incipiency are received into our State Sanatorium, a certain proportion of our beds will remain unoccupied. Therefore, some further provision must be made. The author is permitted to announce that when there cannot be obtained a sufficient number of cases,—incipient according to the definition propounded,—to fill the beds there will be taken the required number of favorable past incipient cases. In deciding what is a favorable case, the physical findings in the lungs, the findings of a general examination, the complications, the rapidity of the development of the disease, the condition of the patient's nervous system, and the ability of the patient to take a full supply of nutrition, should all be carefully considered before arriving at a conclusion. When in doubt the patient can be put on the treatment as outlined by the sanatorium authorities, and he can, perchance, be proven to be a case capable of making improvement. Any other points of importance, which the author may have omitted through ignorance or thoughtlessness, should also be considered. It affords the writer pleasure to state that the medical director, the president and the lay members of the board of managers approve of the plan suggested in this article.

# CLINICAL REPORTS FROM MT. ST. ROSE HOSPITAL.*

BY SOLON CAMERON, M. D., ST. LOUIS.

In presenting this paper from the pioneer hospital for the special care of tuberculosis patients in our State, I am offering you no vague hypotheses but absolute facts and sound deductions, gleaned from the records of the 1400 cases that have been treated at the hospital in the past five years. The work is so large and the workers so few that we are unable to make the most of the material at hand or to work out many of the fine diagnostic points presented to us. It is due largely to the efforts of one man, laboring without remuneration and at the personal sacrifice of time and money, aided by the Sisters in charge of the hospital that the work has grown from a humble beginning to its present importance, and the preparations are at this time under way to double the present capacity of the building.

At Mount St. Rose Hospital, the Mecca for advanced cases of tuberculosis from St. Louis and the adjacent territory, we have patients who have tried every climate, followed every system of treatment, and presenting every known symptom and complication.

The digestive and nervous systems of many of them are deranged owing to the heroic efforts that have been put forth in an attempt to improve the nutrition, check the cough and combat other disturbing complications. Our first course with these patients is to stop all medicine for a few days, in order to get a clearer insight into their true condition and their needs.

We endeavor to gain the entire confidence of the patient and bring him to a thorough realization of the large part that he, by his coöperation and observance of regulations, must play in securing an alleviation or favorable termination of his case.

One of the most important results to be gained from the intelligent understanding of the patient will be his ready perception of the fact that transitory symptoms such as pleuritic pains, gastric disturbances, night-sweats and fever are simply the accompaniments of his general condition and if not of unusual severity need not be specially treated.

If there is no important complication they are put on a regimen of nutritious diet and daily exercise in the open air graduated according to their physical condition. Medicinally they are given a reconstructive, easily assimilable tonic of cod liver oil, creosote, (very small quantities), guaiacol and the hypophosphites, also a combination containing strychnine 1-30 to 1-60, reduced iron and arsenic to support the heart and assist in the upbuilding process.

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Fever, the most common symptom, is in the great majority of cases when properly handled, the one most easily subdued. It does not respond readily to the usual antipyretics and the coal-tar products should not be used except as a last resort. Quinine is useful in many of these cases and also shows a beneficial effect on the patient's general condition, possibly because of a malarial complication which must always be thought of in the Mississippi Valley. The patient with a temperature of 99° or over should be placed at rest in bed and every exertion avoided. Some patients who show a persistent temperature of 99° or a little more may, under close observation, take graduated exercise with the result of reducing the fever, improving the digestion and toning up the system. With this single exception every case of fever should be handled with the rest cure.

Hemorrhage, the most distressing and alarming symptom to the patient, and the one which will often tax to the fullest the ingenuity and resources of the physician, is the one on which there is the greatest divergence as to treatment. In the profuse hemorrhage from the rupture of a large vessel traversing a cavity there is a rapid and fatal termination. This condition is, however, relatively, very rare. In every case of bleeding we apply the bandage and compress according to the method originated by Dr. Porter. This consists of applying around the chest a towel or bandage at least six inches wide as tightly as possible. Under this and over the point of bleeding should be placed a roller bandage or towel tightly rolled. This differs from the ordinary strapping in that there is a single point of compression, fixing the chest wall and rendering it immovable at the site of the lesion. Magnesium sulphate may be used to deplete the circulation. There is something more than a remarkable coincidence in the fact that under this treatment every case of hemorrhage that has occurred at the hospital has been handled with gratifying results. Morphine should be used only when it is necessary to quiet the excitability of the patient. In extreme cases the ice bag may be placed over the bandage or above it. In those cases that show high arterial tension nitroglycerin is a valuable aid, but it should be judicially used and closely watched in its effect.

The night-sweats are in many cases the first danger signal warning the patient of his condition, although they are also a factor in about 25 per cent. of the second and third stage cases. While discomforting and discouraging, especially to a neurasthenic patient, this condition usually responds readily to the rest and fresh air treatment. The body should be sponged at night with alcohol and water, to which a little alum has been added. The various drugs advocated for this condition, most prominent of which are atropine sulphate, camphoric acid and dilute sulphuric acid act with widely varying results in the different cases.

Cough, the symptom that we have always with us, should not be specially treated except in case of the gravest necessity. That cough resulting from an effort to dislodge the accumulation of secretion in the

lung is a very natural act and is necessary to the patient's well-being. He should be instructed to thoroughly clear the lungs with as little coughing as possible and to abstain from all unnecessary coughing with its consequent irritation to the membrane of the lung. That cough arising from complications of the larynx or pharynx should be treated by inhalations, the spray, or local applications, as silver nitrate, oil of eucalyptus or menthol. The most persistent coughs of third stage cases will show a decided alleviation when the patient is placed at rest in bed.

There is one point which to my mind has been greatly neglected by the authorities in dealing with the treatment and prognosis of tuberculosis. Strange as the statement may seem, it is nevertheless a fact, the truth of which is more forcefully brought home to us at a hospital like Mt. St. Rose, where the patients range in mentality from the various learned professions to the illiterate, that the first and most important factor in the successful treatment of tuberculosis is the personal intelligence of the patient in regard to his condition.

When we see a patient endowed with strong mental characteristics, possessing stamina and grit and that do-or-die spirit that is ready to combat any obstacle or endure any hardship in the work of coöperating with his medical advisers, we know that we have a case which, if the fight has been commenced before the odds are too great, will result in victory. The patient must have that intelligence which will enable him to realize the gravity of his situation while the symptoms are slight; to know that he is in the embrace of a treacherous foe, and to know that only by persevering resistance and continued defense can the battle be won. Give us a patient who is ready to follow willingly and confidently the hygienic and medical regulations in his case, be they ever so rigorous, and the prognosis will be most favorable for conquering or at least greatly arresting the disease.

This is a point to which I have paid particular attention, as aiding me in the prognosis for the various cases, and it is a sad but incontestable fact that too many of our patients, it would seem, prefer to die comfortably rather than to get well uncomfortably through an arduous compliance with the line of treatment indicated for them.

Right here you have one of the chief reasons for the large fatality of tuberculosis among the negro race. Their irresolute, supine natures, with their ignorance of the most fundamental elements of hygiene lead them to retire and hide among their fellows like a wounded animal in its lair, with never a thought that the means of cure is within their grasp and more dependent on them than on any one else.

It may be true that hope springs eternal in the consumptive's breast, and if so you should never rest until you have exhausted every means to displace this vague, inactive, groundless hope with the lust for battle with the incidious foe. Even in the acute cases the personality and intelligence of the patient is still our most important factor. Only with the intelligent aid of the patient can we most successfully employ our greatest

ally, the rest treatment, in combating the obstinate and destructive fever with its draught on the patient's strength and rapid onward course of the disease.

As an example of the importance of this factor let me present to you the case of Mrs. C. L. B., who was examined on April 5, having on that day a temperature of 104 and weighing 100 pounds. Late in November of 1907, at which time she weighed 147 pounds, she contracted a severe cold and soon began to have violent attacks of coughing with daily fever. Her physician advised her to take long walks and administered symptomatic treatment, but her symptoms were unabated and she continued to lose weight. I found crepitation throughout the entire right lung, with weak and rapid heart action. The microscopical examination showed the presence of tubercle bacilli in great numbers.

Being a woman of a high order of intelligence I acquainted her with the situation and brought her to a realization of the large part that she must have in the efforts put forth in her behalf. She was placed in bed at absolute rest and quiet, not allowed to comb her hair or perform any other act which would be the slightest exertion to her. She was given no medicine except a little quinine and a tonic. In ten days her temperature was normal, her cough, except for clearing her lungs in the morning, had left her and her appetite and digestion were much improved. On May 10th she had gained 5 pounds, was enjoying freedom from cough and fever, and was spending eight hours a day on a couch in the open air. This result I attribute largely to the attitude in which the patient faced the situation.

I will not weary you with a long recital of case records. But our records have proved that a satisfactory result is impossible with a dull, apathetic, forceless patient. We have never known a bad effect to follow the course of revealing to a patient his true condition and making every effort to arouse his fighting instinct. I believe that the psychic effect of a cheerful, hopeful, aggressive disposition on the patient's general condition can not be over-estimated in this disease. This, gentlemen, with the simple therapeutic measures that I have outlined above is our main reliance at Mt. St. Rose.

# RESPONSIBILITY OF BOARDS OF HEALTH.*

BY A. H. HAMEL, M. D., DE SOTO, MO.

From the standpoint of boards of health, tuberculosis must be and is regarded as an infectious communicable disease, and must, accordingly, be dealt with as all other diseases under this classification. However, in glancing over the statistics, it is appalling to know the proportionate number of deaths due to tuberculosis; and it should therefore be given the first consideration by all boards of health, and every possible safeguard should be taken to minimize the spread and dissemination of the disease.

The first point to be considered is that of mortuary statistics, and I regret to say that with the exception of three cities, there is absolutely no system of recording deaths whereby there could be determined the death rate in any given city or county in Missouri. The three cities giving accurate statistics are Kansas City, St. Joseph and St. Louis, giving the total number of deaths of tuberculosis from all causes for the year 1906, as follows: Kansas City, 358; St. Joseph, 112; St. Louis, 1408. This brings us to a fuller realization that the mortuary statistics outside of these three cities are purely speculative, and impresses upon the medical profession the great importance of securing a legislative enactment on vital and mortuary statistics, in order that the boards of health and the profession in general can render the greatest service to the commonwealth. Following this important consideration, I should also like to refer to two other departments of public health, namely, that of the State Veterinarian and the State Pure Food and Dairy Commissioner, as, in my opinion, legislation is absolutely necessary in these three departments, as one is interdependent upon the other to properly safeguard the health of our people. Considering the State Veterinarian in his work, it will be found in tests made of the dairy cows, that he has found that one in eight of all cows tested had tuberculosis. Is this not astounding? When we consider how many lives are nourished and at the same time infected by this very product, is it any wonder that this dread disease should be destroying so many lives? The unfortunate condition is that the State Veterinarian can make tests only when the owner of the cattle consents to having the tests made, and if the cows are found to be diseased, and the owner consents to the destruction of the animals, he receives only a nominal consideration for the destroyed animals, which is usually a less value than the apparent value of the cows destroyed; and frequently the animals are not destroyed but are disposed of by selling them to parties located in another section of the State. In my opinion, the State Veterinarian should have power given

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him by legislative enactment whereby he would have authority to test all cattle, or at least such cattle as contribute food products to be sold through the market of our State. He should also have a bacteriologist, a number of assistants and absolute authority to destroy infected animals of all kinds.

We now come to the consideration of a State Food and Dairy Commissioner, which office was secured through the untiring energy of the medical profession and the earnest support of an intelligent lay public. This law was recently enacted and is proving of immense value as an agency to public health; but in the practical application of the law a number of minor amendments or additions are very necessary to make it most effective. The needs are, more assistant inspectors, chemists and a freer access to a competent bacteriologist, as the volume of business in a great number of products to be examined has at this time practically overtaxed the working force of the chemists under the commissioner.

In referring to the various departments I find that I have slightly transgressed the purview of this paper, but thought it best to present some of the difficulties which have an effect of lessening the legal responsibilities of boards of health, and will cite an agreement of the three departments mentioned in order to eliminate a dangerous product which was a menace to public health and in which condition no single department to act in the fullest capacity as State officials. The agreement was in relation to milk supply from the various dairies. The Food Commissioner collecting samples of milk but not having a bacteriologist, it was agreed to have the State Board of Health request its bacteriologist to make bacteriological examinations of all specimens collected and report to the Board of Health and to the Food Commissioner. If the product was found to be infected with tubercular bacilli, the products from said dairy or herd were ordered quarantined by the Food Commissioner until such time as the owners of the herd permitted the State Veterinarian to test the cows, and the diseased animals isolated and destroyed; all this being complied with quarantine restrictions were removed, the result being good wholesome milk, whereas it had been infected and was being sold in the markets as one of the principal articles of diet. You will, however, note that to accomplish this important result it required the combined action of the three departments, which of necessity caused some delay.

In presenting this brief synopsis, it is not with a desire to criticise the intent of the statutes under which these three departments are operating, but to try and present in a general way some slight alterations or additions which have become patent by reason of modern investigation, research and application, which would be advantageous from every point of view in improving all departments of public health matters and thereby protect the lives and health of thousands of our people, and would at least be a strong factor in forwarding the fight against the

constantly increasing spread and infection of tuberculosis; for it would remove one of the prime etiologic factors and contribute in a large measure to a healthful food product.

The object of the boards of health is primarily and finally to have general supervision over public health matters of State, counties and cities, to execute all authority derived from the statutes in suppressing and controlling epidemics, and safeguarding every interest, pertaining to preventive medicine, to the citizens or community; and in addition thereto, see that commerce is not paralyzed by reason of an epidemic running wild. This is indeed a very great responsibility, and yet it is merely putting into executive effect such rules and practices as govern the lives of all conscientious practitioners of medicine in private life,—to whom the commonwealth will always be indebted for patriotism and self-abnegation in the furtherance of health regulations through exposure to pestilence and danger, resulting in a progressively larger, more thorough and more perfect system of combating disease; and the demonstrated results are eventually placed upon the statute books as an heritage for the present and future generations, all this, be it said to the glory of the medical profession. There is, however, a difference in the responsibility of boards of health; there is always present in the mind of the honorable practitioner the question of honor and professional duty in controlling certain infectious and contagious agencies calculated to destroy the health, yes, the life of man, which may not be actually classified as legal responsibilities in the practice of medicine in times of epidemic. It really resolves into this fact, that the boards of health are advisory in capacity under most circumstances, and that limitations confront the boards under all conditions, whether they be State, county or city boards of health.

At this point, and in conclusion, if you will permit the digression, I should like to suggest that the vital facts pertaining to public health matters, and in which it is desired to have legislation added or amended as benefiting the whole people, the discussion should not be confined to the walls of a medical convention hall, but there ought to be a committee appointed from this Association, and other departments of health, which should then call to their aid, competent legal talent and formulate a plan of action to set forth and present to the people of our State for consideration and discussion such salient medical matters which might be desired in a legislative way, and which has been proven by scientific research and investigation; then let this plan go to the people, and have it thoroughly discussed with the legislative candidates, so that when the matter is presented for consideration it will be understood by all and not be subjected to amendment at the hand of some thoughless person, or possibly for the purpose of weakening the legal effect of the measures should they become law. In this way it will be possible to conduct a campaign of education on preventive medicine which will redound to the credit of our grand State and stand as a monument to the untiring energy and devotion of our noble profession.

# THE WORK OF THE ST. LOUIS HEALTH DEPARTMENT IN ITS RELATION TO TUBERCULOSIS.*

BY H. WHEELER BOND, M. D., ST. LOUIS, MO.

While the work of the Health Department of the St. Louis City Government in the direction indicated in the title of this résumé is not all that might be expected of it, yet I feel that it has attained a character of sufficient importance in the amelioration of suffering in the care of the city's tuberculous poor to warrant a short account of the forces engaged.

What is known as the Dispensary Division of the Health Department comprises three Dispensaries and a Clinic for Communicable Lung Diseases, making four in all.

This organization is subdivided into the so-called Central Dispensary, located at 11th and Market streets, the North Side Dispensary, at Broadway and Bremen avenue and the South Side Dispensary at Broadway and President street. An increase in the appropriation for the fiscal year, sufficient to open and maintain two additional dispensaries, to be located in the northwest and southwest sections of the city has been asked for. This bill will be acted upon within a few days, and, if favorably, the two additional dispensaries will be opened at once.**

In connection with these dispensaries a well appointed and efficient ambulance service is maintained for the transportation of the sick and injured to the various hospitals throughout the city or to their homes.

These dispensaries are all well equipped and provided with a corps of competent physicians, and while they are designated for the treatment of all classes of injuries and disease, they are at the same time convenient and efficient in the treatment of the tuberculous poor.

The special clinic for communicable lung diseases is located near the Central dispensary. Its equipment is fully adequate to facilitate the work specified and the physicians in charge are especially selected from the standpoint of competency. A trained nurse attendant will soon become a necessity if the demands of this clinic continue to increase at the present rate. The Central and Branch dispensaries refer many tuberculous cases to this clinic for instruction and treatment, as do also many public and private charity organizations and individuals interested in the work. During the fiscal year ending April 13, 1908, there were 1825 tuberculous patients treated at the dispensaries and the clinic. Of these 1772 were treated at the clinic.

*Read in the Symposium on Tuberculosis, Fifty-first Annual Meeting, Springfield, May, 1908.

**These branch dispensaries were opened in July, 1908.

During the corresponding period for 1906-07 the total number of tuberculosis cases treated was 234, and at the clinic 148, showing a total increase for the last fiscal year of 1591 over the preceding year.

The increase in the number of cases treated at the Clinic for Communicable Lung Diseases during the fiscal year of 1907-08 over the year 1906-07 was 1624. This great increase at the clinic is explained by the clinic's becoming more generally known, and the steady improvement in the efficiency of its management. Its possibilities would seem to be almost unlimited.

A city ordinance recently enacted requires the reporting of all cases of tuberculosis to the Health Department, fumigation of the place of abode of each case after its termination or removal, and the distribution of instructive literature.

This ordinance became operative about two years ago, and upon a carefully studied estimate, I am enabled to state at this time that about fifty per cent. of all cases occurring in the city are being reported. Previously our statistical records showed no entries of tuberculosis at all except those copied from death certificates in the mortuary office. This would show that in two years the report of living cases of tuberculosis has gradually arisen from nothing to the percentage figure of 50, and while the increase is slow, we confidently hope to show in the near future a more dignified and reasonable percentage in reports. It would probably surprise most of you to know how difficult a matter it is to fully enforce a law of this kind. Such reports are distasteful to the physician and abhorrent to the family of the patient, as well as the patient himself, all of which when combined with the natural carelessness of the profession with regard to matters of statistical value and the importunities of the family for delay or negative action, militate heavily against perfect returns. In calling the profession's attention to the ordinance requirements concerning tuberculosis the Health Department, as in many other matters, sent out many circular letters with copies of the ordinance so that no one might plead ignorance of the law as an excuse when the more drastic measure of prosecution in police court for non-compliance become necessary. Legal proceedings are being instituted whenever the evidence is convincing of wilful negligence, and with decided effect upon the returns. Until the medical profession realizes the necessity for these reports in the formation of complete statistical records, which are so important in the work of relief and prevention of tuberculosis, and will earnestly coöperate with the health authorities in their efforts, a reasonable fulfillment of their duties toward the public and the ultimate control of this miserable disease will never become a fact. Our ordinance requirements should go a step farther and with its present recognition of tuberculosis as an infectious disease should delegate authority to the health officials to apprehend and provide proper hospital or sanitarium treatment whenever in their judgment the patient or his friends are unable to provide the necessary medical care and sanitary surroundings. Such a

measure would not only insure more favorable conditions for the patient himself, but would also be an effective means against the dissemination of tuberculosis among his associates.

The ordinance above referred to requiring fumigation of premises after tuberculosis cases, provides that it may be done under the direction of the physician in charge, but in accordance with a method approved by the Health Department; or by the Health Department itself, upon request by either the physician or family. Bona fide evidence, however, must be given that a case has actually existed on the premises requested fumigated before the Health Department will act. This rule is necessary for the Department to prevent imposition on the part of many who make the request for the simple purpose of general house cleaning where no contagious or infectious disease has existed.

The result has so far been that the Health Department has been requested to and has fumigated all such premises.

Instructive literature in dodger form has been ordered distributed by all the dispensaries and the sanitary division.

Every reported case is to receive by return mail these printed suggestions relating to proper food, personal hygiene and household sanitation.

The old booklet form of general instructions, in use until the present, has been found to be too cumbersome, expensive and incomplete of detail for this special distribution.

A bill providing for the medical inspection of schools was introduced at the last session of the Municipal Assembly but was never acted upon. Another has already been drawn up and is about to be introduced. The experience of other cities with medical inspection of their schools has conclusively shown the great value of the work by the early detection and the exclusion from the schools of children afflicted with contagious and infectious disease. None of the cases so detected escape report to the proper authorities, nor the usual quarantine regulations at their homes or elsewhere. Thus it is possible to prevent the spread of these diseases amongst school children, and as tuberculosis is, in St. Louis, declared by ordinance to be an infectious disease, there can be no doubt of the value of medical school inspection in limiting its spread.

The eleemosynary hospital facilities of St. Louis for the general care and treatment of tuberculous patients are all that could be expected of institutions of their kind. The City Hospital has a fire-proofed, well-ventilated and lighted building in which there are two spacious wards with southern exposures devoted to tuberculous patients. Connected with each ward are several private rooms, baths and lavatories.

The patients receive every care and comfort possible to the institution. The average number of patients under treatment there from day to day is between forty-five and fifty, aside from a few that make their regular visits to the so-called out-door clinic located at the hospital. This clinic has recently become a part of the hospital work.

At the Female Hospital there is also maintained a special ward for this class of patients, and while this institution is not of the modern up-to-date type, yet this ward serves its purpose well, and has the capacity to comfortably accommodate from fifteen to twenty souls.

Located upon the top floor of the new building at the Poor House a large ward has been especially provided for the segregation and treatment of tuberculous paupers. This ward is isolated from the rest of the building, and as it stands with its baths, lavatories, large windows, broad veranda, thorough ventilation and sun exposure, is excelled by few. About twenty-five is the usual number of consumptives to be found on this floor.

The work done by the city for many years along the line of the general care and treatment of the tuberculous poor has no doubt far exceeded the limit placed upon it by the average citizen. Yet when we are confronted with the fact that pulmonary tuberculosis claims in death from among our citizens seventy-two per cent. of the fatalities occurring from all the infectious and contagious diseases combined, you cannot but agree that the time is, and has for a long time been, at hand when the community should awake to the necessity for especial effort toward the limitation and control of this most insidious and subtle scourge of humanity.

At the last session of the Municipal Assembly of St. Louis an ordinance was enacted directing the Mayor to appoint a Tuberculosis Commission. This Commission has just been appointed, and its members were carefully selected from the view-point of their intellectual, business-like and public spirited qualifications. It is provided that the Commission's work be facilitated as far as possible by the coöperation of the Health Department. The work of this Commission is to study the existing conditions of the city in their relation to tuberculosis, to solve the problem of the best method for the limitation and control of the disease, and to report its findings with recommendations. When the Commission's labors have come to a close it is to be devoutly hoped that its recommendations may mean a solution of the problem, and that prompt action may be taken thereon.

While our hospitals are doing well toward the patients assigned to their care, they are nevertheless not the most proper places for the treatment of tuberculosis. It is high time that we were specializing in our battles against this "great white plague," and the idea is well supported by the creditable results shown by the work of special clinics for lung diseases and tuberculosis sanitariums wherever found.

We have tested the special clinic in St. Louis and have been rewarded with flattering results in a remarkably short space of time. We want more such clinics and we want a modern tuberculosis sanitarium for St. Louis situated somewhere in her handsome suburbs beyond the limit of smoke and noise. We are faithfully working for both, and we have reasonable hope of possessing both in the near future. With this much

accomplished, and with the enactment of a law empowering the health authorities to properly regulate the conduct of those afflicted, we will have at least made a beginning in the work of the relief and prevention of tuberculosis.

DISCUSSION.

Dr. L. M. Warfield, St. Louis: It seems needless to dwell on the necessity for the early diagnosis of tuberculosis after what has been said this afternoon, but it is always well to say over and over again that the most important thing is the early diagnosis. While the finding of the tubercle bacilli is always evidence of the presence of the disease, because one does not find it in the sputum it does not mean that the patient is not tuberculous. A specimen may be sent to the bacteriologist and the report may come back from the laboratory after a dozen such examinations, "Bacilli not found," and still the individual have tuberculosis. We cannot emphasize too positively that the bacilli do not have to be found to make a positive diagnosis of tuberculosis. Of the newer methods of diagnosis, hardly a magazine is read that does not contain an article on the cutaneous or ocular reaction. I have used the cutaneous reaction more than the ocular reaction, for the eye is too delicate an organ to be played with. I used a dilution of 1 to 4 for the cutaneous tests. My experience was that cases of tuberculosis all react. Some cases that did not show tuberculosis clinically were subjected to the test and some reacted and some did not. Some of those that reacted were old, cured cases of hip disease, or disease of the spine. It seemed to me that the value lay in the negative result. If one got the reaction one could only say that tuberculosis was probably present in the system somewhere. If there was no reaction, and the symptoms were not definite, it would be safe to say that the patient did not have tuberculosis. I found that those people who were very well indeed, who had been cured of a tuberculous condition of the hip, for example, would give the reaction. A strong reaction would indicate that the patient had in his body antibodies sufficient to counteract the infection. In the ocular tests I have used a 2 per cent. and a 4 per cent. solution of the old tuberculin in 3 per cent. sterile boric acid solution and it seemed to me there were advantages in this method. It keeps well, I have had a beautiful reaction after keeping it four or five weeks. I have never seen a case of tuberculosis that did not react to a 2 per cent. instillation into the eye. I have never had any serious trouble from the ocular reaction. An interesting point has come up and it is this: take fifty children from four to twelve or fourteen years and of those fifty children about 25 per cent. will react to the cutaneous tuberculin test. These children were healthy, apparently, but often there was a history of parental tuberculosis or they had been exposed to tuberculosis. On the contrary not a single case reacted to the eye test. I believe the eye test is more apt to show the presence of an active tuberculosis and the skin test is more

apt to show the presence of a latent or healed tuberculosis. This is simply one of the many things that may be employed to clinch the diagnosis. As to the Roentgen ray in the diagnosis, my experience has not been sufficient to enable me to speak with authority on the subject, but it tends to get us away from the old methods of diagnosis, auscultation and percussion. I do not believe we should trust too much to the x ray findings. After other means have been exhausted, then we may employ this method as a final test. It will only show infiltration, which may be actually something other than tuberculosis at the apex of the lung.

Dr. John Green, Jr., St. Louis: We are told that the instillation of tuberculin should be made into a conjunctiva that is absolutely normal. Now the determination as to what constitutes perfect normality is difficult. In the first place there should be a direct comparison between the color of the conjunctiva of each eye. When slightly congested the mere mechanical irritation of the drop may produce a reaction where there is in the body no tuberculosis whatsoever. A case in point will illustrate. A young man had a central lesion of the cornea which appeared to be tuberculous. The other eye was slightly congested. I used a one per cent. solution of tuberculin according to Calmette and got, in twenty-four hours, a reaction indistinguishable from the typical ophthalmo-reaction. Following a von Pirquet injection I failed to get any reaction, and I was then inclined to doubt the presence of tuberculosis. I put the patient on potassium iodide and the corneal infiltrate melted away like snow before the sun. It is true that in general the reaction is not harmful; yet it may, in exceptional cases, prove distinctly harmful. In a strumous child we may get the development of an interstitial keratitis or even, occasionally, the development of a corneal ulcer. Cases of follicular conjunctivitis following tuberculin instillation have gone for weeks unrecognized because the physician failed to evert the lids.

Dr. G. S. Dowell, Braymer: I remember one young lady who went to Phoenix, Arizona, after having had a number of hemorrhages and all the signs of tuberculosis. She had one hemorrhage after reaching Arizona. It was the hot season and she could do nothing but rest in the afternoon. She remained there for eighteen months and then we thought it was time for her to come home on a visit. She came home, had no more coughs or sweats, had regained her normal weight, and has been well for two years. As to what boards of health may do, some six months ago in our little town I read an article before our city council in regard to spitting on the sidewalks and in public places. In consequence an ordinance was enacted prohibiting spitting in public places. We had always had places there where men congregated on the sidewalk and made those places look like cuspidors. We have stopped it and intend to keep it stopped, if we get enough fines to build a hospital. It is the duty of every man to exercise his power to help his fellow citizens. Write a paper on school sanitation and read it before your

school board. It is through these efforts that we will stamp out the great white plague.

Dr. William Porter, St. Louis: The education of the people is the main factor in combating tuberculosis. When we began the public campaign in this state, I wrote to Dr. Trudeau asking him to send me, out of his large experience, some working suggestion for our early efforts as an organization. He replied (in effect), "Educate the people to a knowledge of the vital and economic loss by tuberculosis. They will soon devise ways and means." In Missouri the educational work is well advanced and our State Sanatorium, Mt. St. Rose and many clinics, as well as laws in force, are evidences that the problem is being worked out.

Regarding the use of tuberculin either for diagnosis or treatment, I am willing for the present to leave that to others. Formerly I used it in a somewhat large series of cases but am convinced that, even with every known precaution, I did some harm. In the most of cases as they come to us—in the large majority—we can make the diagnosis without tuberculin. The stethescope is better than the syringe. In the closed or undetermined stage, if the physical signs are not pronounced enough upon which to found a diagnosis, I am content to care for the patient giving him the benefit of the doubt until further developments. No time is lost—no harm is done.

Should tuberculin be used it should be with the greatest care. Again quoting Trudeau: "The physician who in using tuberculin neglects the rise of only one-tenth of a degree is likely to have trouble." As a rule the consumptive has foci of tuberculin within the lung and the better and main care is to guard against a too rapid absorption of what is already threatening him.

I would emphasize the value of extreme care and the observing of any marked departure from symmetry in size, form or movement of the chest surface. We should also remember that the different physical signs are the expression of definite, pathologic changes, and read these changes through the signs. Especially should we note the circumscribed, small, rough bronchial sound, with a little change in pitch and possibly extended exspiratory murmur.

Careful exploration of the posterior chest should always be made with comparison of the two sides. It is here we get some of our most important early evidence.

It is not necessary that consumptives should be isolated. The consumptive is harmless if he is intelligent. At Mt. St. Rose, where we have had 1600 cases in five years, we do not know of a single case that has acquired the disease either in the staff or the attendants. This is the record at other institutions where they have learned the easy methods of prevention. I believe that Dr. Brown will tell you he feels safer at Mt. Vernon than in some hotels.

We must teach the people that the presence of this disease is a grievous burden. This state can not afford to lose five thousand of its

best citizens and twenty-two millions of dollars every year from this cause. It is within our power to diminish this result at least one-half. Think of the responsibility that rests upon you in dealing with this great question. I want to thank all of you who have aided this cause in the past year. I have found everywhere willing workers, some who are willing to give up their practice to go to the legislature next year to help in this work. Some of our best members are sacrificing themselves in this cause. These men must be backed by your influence.

Dr. W. L. Bosius, Gallatin: I am the medical member of our health board in my county and the president of our local society. We have a young attorney there who is very active and he is now every week firing something into the newspapers getting the people ready for the open meeting of the county society the first Tuesday in July, when we will have papers on hygiene. There will be papers on school hygiene, the early diagnosis of tuberculosis and several other papers. After all, the court of final resort is the public, and the public must be educated if you want to get the right decision, and the public must be educated through the efforts of the physician who takes the matter in hand. I remember a story told by a doctor of Poplar Bluff. A physician was called to see a man of affairs and after the examination the patient was told that he would soon pass away from tuberculosis of the lungs. He replied: "I don't believe it," and sent for Doctor Number Two, who said to the patient: "You have nothing the matter with your lungs, but with your liver." A few months later the patient sent for the preacher. Number One said he wanted an autopsy and it was granted and both physicians were present. A part of both lungs was found involved, but the liver was perfectly normal. Number One said: "I told you so," and Number Two replied: "You doctored his lungs; I doctored his liver. If you had done as much for his lung as I did for his liver, he would be alive yet." Doctors like Number Two will not count for much after we have the people enlightened.

Dr. Browning, Los Angeles, California: California, as you all know, is an open sanatorium. Every word Dr. Porter has said is as we see it, especially in regard to the segregation of these patients. It is a matter of education and protection wherever they may be, whether in sanatoria or not. They may be treated, and many must be, in places other than sanatoria. As to diagnosis, the patient should go to the physician early, but on the other hand the physician must be educated to make an early diagnosis. Those of us who make a specialty of this subject know how many patients have gone to the physician requesting such an examination when it has not occurred to the physician that such a condition exists. Strip your patient and examine every part of his chest and when that is done you will be able to make the diagnosis most frequently without any other means of diagnosis. As to the tuberculin test, the temperature reaction is not so important as the finer reaction which you must watch for with your stethoscope. As to the Calmette reaction,

I am a little afraid of that and my friend Dr. Cooper, who has recently returned from Vienna, tells me that he saw one case in which an eye was lost as a result of the test.

Dr. R. W. Mills, Webster Groves: It is common to maintain that there are many cases of early pulmonary tuberculosis in which the tubercle bacillus cannot be found. I have made hundreds of examinations and I can not recall a single instance where it could not be found after careful examination in which the case subsequently proved tuberculosis. I have found it after eighteen examinations had been made on as many consecutive days. I can not see that there is any reason why in early tuberculosis the bacillus should not be found. The early lesion is superficial and I do not see how such a lesion could exist without throwing into the sputum tubercle bacilli. Another thing is the making of sputum examinations by the country practitioner. It is a difficult thing to carry a microscope around to make a blood count, and no man who has been out of a laboratory for a few months will risk making a differential diagnosis in a suspected carcinomatous condition, but no man can fail to recognize the tubercle bacillus when he sees it.

Dr. J. O. Young, Ozark: This is the first state meeting I have ever attended and I do not know how to express my appreciation of what I have heard and learned. When I go home our society is going to reorganize, elect new officers and begin the fight against tuberculosis as we have never fought it before. One of the gentlemen struck the keynote when he spoke of reading papers before the city council. I intend to follow his advice when I return home, and do what I can to have the custom of expectorating in public places stopped.

Dr. L. I. Matthews, Joplin: There are a few things I would have liked to hear spoken of, *e. g.*, the method by which tuberculosis is spread. Several months ago I received a request from a dairyman to inspect his herd. The stables and everything about them were in good condition and the animals were sleek and fat. Within the last two months the state veterinarian has inspected them and found twelve of those cows suffering from tuberculosis. They were killed and the post mortem confirmed the diagnosis. Now, what is the result? The dairyman has lost twelve of his cows and the State does not give him a dollar for his loss. There is a difference of opinion as to whether tuberculosis in cattle may be transmitted to man. If it is true that the disease may be thus transmitted, then unquestionably those cows should have been killed. But as great a man as Prof. Koch has said that bovine tuberculosis can not be transmitted to man. If it is true that man may be infected by bovine tuberculosis, then infected cattle should be killed, but the doctors of this State ought to demand that when private property is taken for the advantage of the State, that the man who suffers this loss should be pecuniarily reimbursed.

Dr. McAlester, in closing: In regard to the ocular test, after you have used tuberculin in one eye, you should make the second instillation

in the opposite eye, for, even in a normal individual when you make repeated applications you will get a slight reaction. After instilling tuberculin in the eye, you can get the ocular reaction following a subcutaneous injection. Another thing, no one should use tuberculin in an eye that is not absolutely normal. Twenty-five per cent. of the children giving this reaction give a history of having lived with tuberculous people though physical evidence of tuberculosis is lacking.

Dr. Porter: Where a patient intelligently understands conditions and is amenable to the suggestions of his physician he is harmless. It has been shown that under proper conditions the bacillus can live for days. How long it may live on the sidewalk we do not know, but it will live long enough to be a danger. It has been conclusively shown that wherever there has been a limitation of promiscuous spitting for any length of time, there has been a decrease in the number of cases of consumption.

The question of bovine tuberculosis is yet *sub judice,* with the preponderance of evidence in favor of bovine infection in the human being. Enough has already been shown to make the question one of municipal value and one in which our State veterinary department may become an additional factor in stamping out tuberculosis.

Dr. Engelbach, in closing: It was not the intention that this paper should convey the idea that the x rays should displace physical findings in the diagnosis of tuberculosis of the lungs. This method of examination was advocated to get a more accurate idea of the extent and character of the lesion, and a confirmation of suspect lesions. It is therefore merely an adjunct to the other means of examinations. As to the limitations of the new tuberculin reactions, Dr. Shankland and I have over 1,000 tests at the St. Louis City Hospital, and our findings confirm many of the later reports on these reactions. The conjunctival reaction is by no means free from danger. It has been proven that this reaction has produced serious lesions in practically normal eyes. We found that the average negative reaction (cutaneous and conjunctival) in positive tuberculous cases range from 30 to 40 per cent. Other diseases not tuberculous gave practically the same number of positive reactions as suspected tuberculous cases. We obtained positive reactions in about 57 per cent. of the cases in apparently normal individuals with either one or the other of these reactions. In our work these reactions bore no relation to the activity or extent of lesions. For instance, the conjunctival reaction would be positive and the cutaneous reaction would be negative in a practically normal individual. This unexplainable variation of the reactions also occurs in tuberculous and non-tuberculous cases. We concluded from this work and review of the literature up until that time that the value of these reactions as diagnostic agents in adults was greatly limited. It is very probable that the cutaneous reaction is of great value as a diagnosis sign in tuberculosis of children.

Dr. McN. Miller, in closing: It is reported from the Hygienic Laboratory, Public Health and Marine Hospital Service, that the milk from 11 per cent. of the dairies furnishing milk to the Washington market contains tubercle bacilli. Butter is also infected. Dr. Lucky believes that the owners are not sufficiently remunerated for their loss when tuberculous cows are killed, and that is what he is striving to correct.

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Paper Money is Popularly supposed to be a carrier of infectious diseases. No doubt microbes do find a resting place on many of the bills now in circulation, but investigations which have been conducted at the research laboratory of the New York Board of Health indicate that although paper money is by no means free from bacteria, it is, nevertheless, not quite so prolific a breeding ground as may be supposed. On clean bank bills an average of 2,350 bacteria were discovered. On soiled bills the average was 73,000. This investigation was made some years ago. Its results have now been checked by Warren W. Hilditch of the Sheffield laboratory of bacteriology and research at Yale. The dirtiest bills which banks and railways could place at his disposal showed an average of only 142,000 bacteria for each bill. The lowest was 14,000; the highest, 586,000. Curiously enough, the cleanest looking note was charged with 405,000 bacteria, and the dirtiest with 38,000, which seems to prove that there is no necessary connection between dirt and bacteria. Mr. Hilditch finds that guinea pigs inoculated with these bacteria contracted no disease, which would mean that money bacteria are not necessarily virulent.—(*Scientific American.*)

# Journal
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ADDRESS ALL COMMUNICATIONS TO METROPOLITAN BUILDING, ST. LOUIS, MO.

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## EDITORIAL

### "NEW" TUBERCULOSIS CURE.

Following close upon adjournment of the International Congress on Tuberculosis at Washington—a convocation composed of men who have devoted many years of study and research into means for preventing and curing tuberculosis, the arch-enemy of mankind,—we view as a hopeful sign of the times the paucity of alleged tuberculosis cures fobbed off on a guileless public. For if ever time and tide rolled in unison to carry successfully onward any plan promising quick relief from this disease, the present moment seems fit to launch the project. The receipt of the following letter, therefore, created no large measure of surprise in us and we publish it for the benefit of those who may not as yet have heard of the marvelous discovery which the writer of the letter promises shall prove a boon to suffering humanity:

November 19, 1908.

Dear Sir:

Over 200,000 people die of consumption in the United States every year. 480 families will gather about the caskets of their dead within the next twenty-four hours. Of the deaths between the ages of fifteen and forty-five, one-third are from consumption.

Statistics show that one-seventh of the deaths are from consumption. Its ravages head the death list in every city in the United States.

The germs of tuberculosis lie beneath your feet; they fill the air that is wafted into your face. Water and food are conveyers of this insidious foe.

The unsuspecting are promulgating the seed by expectoration on the streets and sidewalks, in cars, and even on the floor of their homes, seeds which are scattered among thousands by the winds.

Dr. Judd Q. Lloyd, of 548 De Baliviere Avenue, has, after twelve years of hard work, discovered a cure for consumption. He has on file thousands of letters from physicians and others which will prove the above statement. He has just organized a company called the Re-Stor-All Chemical Company, with $200,000 capital. All Common Stock, no Preferred, full paid and non-assessable, $10.00 per share.

Dr. Lloyd advises that he expects to spend $3,000 to $4,000 a month advertising in newspapers and magazines, selling direct to the public. There is about $40,000 already sold, and he does not need all cash at this time, therefore, selling stock at 10% cash and 10% monthly. You will find on the back of this, a letter from Judge Geo. B. Sidener, with reference to his experience with Re-Stor-All. Enclosed is a subscription blank which kindly fill out and return for the amount of stock you want.

I have made a personal investigation of the merit of "Re-Stor-All" and believe it a positive cure for Consumption.

A free write-up in the "Star," which we are mailing you under separate cover, shows actual Photos taken in action.

Respectfully,

(Signed) JOHN S. POINDEXTER.

On the back of this interesting document a laudatory account of the infallible virtues of this new-found remedy is printed over the signature of one of our legal lights. It reads as follows:

Oct. 27th, 1908.

J. Q. Lloyd Chemical Co.,
St. Louis, Mo.

Gentlemen:

At the request of one of your stockholders, I have given your Re-Stor-All a thorough trial for tuberculosis, which I contracted some four years ago after a severe attack of pneumonia.

I spent a large amount of money in traveling and doctoring, when last July my physician decided that my existence would end inside of two months. I had lost my voice entirely and was unable to get out of bed without assistance; in fact, I was wishing for the end to come as rapidly as possible. On the 26th day of July, of this year, I started on the first bottle, taking it every hour, sixteen hours per day, and living out of doors in a tent at the same time. At the end of the first week my appetite, which I had lost, began to get good, and in two weeks I was eating five times a day. I have taken several bottles in the past three months and have gained sixteen pounds, and think without a doubt that Re-Stor-All has saved my life.

I cheerfully recommend it to any one who is suffering from tuberculosis, believing it is the only medicine that will effect a cure, and believe without a doubt it is one of the greatest blood purifying medicines that was ever manufactured.

I advised my Mother, who is 70 years of age, and who was afflicted with paralysis in one side of her face and her right arm, for 20 years, to try Re-Stor-All. Her face, which had been drawn to one side, and one eye-lid, which had been drooped down, and also her right arm, was completely cured by the use of one bottle.

You have my consent to use this letter or myself as reference at any time you may see fit. Yours truly,

(Signed) GEO. B. SIDENER.

Further to impress upon the astonished mind of the recipient of these remarkable letters the epoch-making discovery that has burst upon the medical horizon, a page write-up in the St. Louis *Star* is laid before him,

wherein is described in pathetic detail the travail of Mr. Lloyd in his humanitarian pursuit of a cure for consumption.

Having solved this great problem,—a problem that has agitated many of the most brilliant minds of the century and prompted the expenditure of millions of dollars by national grant in various countries of the world,—at least to his own satisfaction, and to the satisfaction of the bright lights in local society who signed the letters reproduced above, the discoverer, with a truly philanthrophic spirit, invites everybody to participate in the fruits of his labor, and offers us an opportunity to share in the profits of the great organization that he has founded for the purpose of distributing this highly important remedy throughout the universe. But the delicate manipulation of the "ic" acids and alcohol to prevent an explosion when ingested—a dire result that would follow if these articles were mixed in any other manner than that evolved by the ingenuitive brain of Mr. Lloyd—occupies so completely the time and attention of that gentleman that he must, perforce, leave in the hands of others the small detail of distributing the stock of the company.

That Messrs. Poindexter and Sidener are entirely sincere in their protestations of belief in the exalted virtues of this remedy for tuberculosis cannot be doubted, for the former is striving most strenuously to dispose of $200,000 worth of the stock of the company, and the latter has, he declares, been cured of the dread malady, after having given up all hope, while his mother, now passed seventy years of age, was cured of a paralysis of the face and arm.

That legal talent, such as is evidenced in Judge Sidener, is large enough to embrace the therapeutic value of some new drug, should not be at all surprising considering the many educative factors which enter into that profession, but when the legal mind can grasp not only the possibilities of a new preparation for the cure of consumption, but sees in it also a potent remedy for paralysis, we are reminded of what Dr. Johnson said when moved to voice his opinion concerning a certain barrister: "Far be it from me, sir, to speak evil of any man behind his back, but I believe him to be an attorney."

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## A COMMENTARY.

That the spirit of humanitarianism which has pervaded the practice of medicine from time immemorial has been a misunderstood and much maligned section of the code which governs the conduct of the medical practitioner in his relations to patients and the public, is well-known; and we have become so inured to this state of affairs that the expectation of a just perception of this basic principle in medicine from

those outside the profession, has well-nigh died within us, though this has not prevented us from proceeding along the path which our precepts and principles have taught us to be the right one for a truthful interpretation of these tenets. Yet every act of the physician, when in the presence of sickness and suffering, is prompted by charity and benevolence, and the frequent sacrifices of self-interest, both financial and physical, which a faithful adherence to these principles enforces, has not dulled the spirit to persevere in doing good. It is, therefore, somewhat in the nature of a vindication of the soundness of these principles that we learn of the existence of a society in New York which undertakes to assist poor people who have occasion for the law but are unable to afford the remedy. Such cases are handled by this society at a minimum of cost to the client (23,000 cases thus far managed have been handled at an average cost of $1.18).

This situation has provoked a comparison between the legal and medical professions by the New York *Evening Post* that reflects rather more credit upon the medical than the legal profession. "In most quarters," say the *Post*, "the profitable tradition is kept alive that it is undignified in a lawyer to accept less than $10. He who takes less invites the pettifogger's reputation. The medical profession is now almost completely delivered from such superstitions; fees are gauged with reference to the actual costs and to the patient's purse. * * * * The physician whose doorbell the poor man fears to ring is fast becoming an exception. But how many attorneys earning from $10,000 to $100,000 a year are noted for the geniality with which they greet the laborer beseeching the collection of his wage from a thieving employer?"

## EDITORIAL NOTES

An English-Chinese Lexicon of Medical Terms, prepared by Dr. Philip B. Cousland, has just been published in Shanghai. The author although an Englishman by birth, has based his book largely upon the medical dictionary of Dr. George M. Gould, of Philadelphia, a high compliment to American scholarship. Dr. Cousland has recently published a translation of Prof. Halliburton's edition of Kirkes' Physiology.

The Directory of the American Medical Association for 1909 will soon be ready for publication. The names of all members of county societies are printed in capital letters which at once distinguishes them from non-members of county societies. The names of members of the American Medical Association have the additional distinction of being marked with the insignia denoting such affiliation. Secretaries of county

societies should not overlook this in their efforts to induce eligible physicians to join the county society.

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At a Meeting in Rolla recently, held under the auspices of the State Society for the Relief and Control of Tuberculosis, which was attended by a large number of physicians and others interested in the work of this organization, a committee was appointed to confer with the Phelps County Medical Society and accomplish plans for the organization of a local society for the prevention of tuberculosis. The Hon. A. P. Murphy, Congressman from that district, was appointed chairman of the committee which is composed of ten ladies and gentlemen.

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The Reorganization of Montgomery County Medical Society will be accomplished on December 15th. On that date the district councilor, Dr. A. R. McComas will meet with the physicians of Montgomery County at Sullivan and perfect reorganization plans. We are glad to learn of this contemplated action and will welcome the affiliation of Montgomery County Medical Society. The eligible physicians of this county have too long been deprived of the benefits of membership in the State Association and the uplifting influence which comes from organized efforts. We shall look forward to the receipt of reports of the meetings for publication in the Journal.

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Dr. J. A. Harris, of Mt. Vernon, has issued a pamphlet entitled "A Plea for the Missouri State Sanatorium," in which he makes a strong argument for immediate action by county medical societies to assist the officers of the State Sanatorium for Tuberculosis in securing a liberal appropriation from the legislature for the maintenance of the Sanatorium. Examples have multiplied during the past few years showing that it is a profitable investment for the State to be liberal with its funds for the conservation of the health of the people. Dr. Harris adduces additional evidence which should convince our legislators of the economy of being liberal with funds for the maintenance of the Sanatorium at Mt. Vernon.

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Dr. G. A. Jordan has been appointed assistant health commissioner of St. Louis in the place of Dr. William Winn, resigned. Dr. Jordan was formerly chief dispensary physician. He is an experienced and capable public health official and possesses marked executive ability. In 1894, while holding the position of chief dispensary physician, a severe out-break of smallpox occurred in St. Louis, at which time he demonstrated his efficiency by limiting the spread of the epidemic. Dr. Winn has been connected with the Health Department for the past two years. He was an energetic and capable officer, indefatigable in his work of maintaining proper sanitary conditions in all parts of the city. He will resume private practice in St. Louis.

### New Members Missouri State Medical Association.

Baird, Jesse P., Marionville.
Baron, Jules, 3357 California Ave., St. Louis.
Benham, Parkville.
Bles, Victor A., 733 Metropolitan Bldg., St. Louis.
Butler, Thomas E., Kirksville.
Byrd, R. Lilburn, 1000 Bittner St., St. Louis.
Conger, D. W., Altona.
Drechsler, Louis, 2701 Blair Ave., St. Louis.
Graves, Spencer C., Lister Bldg., St. Louis.
Hanser, Herman A., 3651 Delmar Ave., St. Louis.
Hawkerson, W. O., Roanoke.
Herrick, Harold C., 5605A Easton Ave., St. Louis.
Hull, Lafayette, Marquand.
Kearney, Elmer, New Point.
Kerwin, William, 3635 Russell Ave., St. Louis.
McClanahan, J. W., Forbes.
Nicks, Harry G., 933A Goodfellow Ave., St. Louis.
Prichard, James B., 3661 Finney Ave., St. Louis.
Schulte, Francis A., City Poor House, St. Louis.
Scott, Olive D., Century Bldg., St. Louis.
Smith, J. M., R. F. D. No. 5, Butler.
Taylor, Herbert, New Bloomfield.
Wallace, G. W., Bertrand.
Willis, J. B., Weston.
Wolter, Otto L., 1446 Blair Ave., St. Louis.

### Changes of Address.

Dr. J. Q. Adams, from Belleview, Mo., to Mullen, Nebr.

Dr. V. P. Blair, from Linmar Bldg., to Metropolitan Bldg., St. Louis.

Dr. Theo. Blakesley, from 100 Rialto Bldg., to 515 Commerce Bldg., Kansas City, Mo.

Dr. C. E. Fronk, from Maryville, Mo., to Army Medical School, Washington, D. C.

Dr. Thomas E. Graham, City Dispensary, St. Louis, to Chula, Mo.

Dr. L. T. Guggenheim, from 4058 Lindell Blvd., to 3894 Washington Ave., St. Louis.

Dr. M. A. Hanna, 100 Rialto Bldg., to 515 Commerce Bldg., Kansas City.

Dr. N. O. Harrison, from Rialto Bldg., to 515 Commerce Bldg., Kansas City.

Dr. R. T. Henderson, from Schumer Springs, Mo., to Jackson, Mo.

Dr. Louis E. Missimore, from 4107 Finney Ave., to 4869 St. Louis Ave., St. Louis.

Dr. J. E. Neely, from Van Cleve, Mo., to Calhoun, Mo.

Dr. Allen Porter, from Rialto Bldg., to 515 Commerce Bldg., Kansas City.

Dr. Paul M. Rothman, from 1146 N. 11th St. to 1446 N. 11th St., St. Louis.

Dr. E. H. Skinner, from 212 Rialto Bldg., to 621 Commerce Bldg., Kansas City.

Dr. D. Clay Todd, from 4115 Finney Ave., to 1231 N. Taylor, St. Louis.

Dr. E. J. Wallace, from Centralia, Mo., to 421 Atlantic Ave., Long Beach, California.

Dr. Marvin Winn, from Ilasco, Mo., to Hannibal, Mo.

# OBITUARY

## ARTHUR G. RANDOLPH, M. D.

Dr. Arthur G. Randolph was born in Carthage, Illinois, January 13, 1876; died in Kansas City, November 8, 1908; age 32 years. Dr. Randolph obtained his education at Lake Forest University and the University of Virginia, taking his medical degree in Rush, where he graduated in 1899. Immediately following his graduation he located at St. Joseph, Mo., where he practiced for 18 months; during this time he was medical examiner for the Burlington. From St. Joseph he located at Grandon, Mo., and after practicing there for one year changed his location to Kansas City.

The following resolutions were adopted by the Jackson County Medical Society:

Again the grim reaper has invaded the ranks of our Society, bringing us to realize that "In the midst of life we are in death."

The mantle of grief overspreads Jackson County Medical Society, and we mourn the loss of our dear friend and fellow-practitioner, Dr. Arthur G. Randolph, whose demise occurred at his home in our city on November 8th, 1908.

Be it resolved, that we extend to the bereaved family our deepest sympathy, with the assurance that we mourn with them, and that we will ever cherish the memory of the loving soul which has returned to its Maker.

Be it further resolved, that a copy of these resolutions, expressive of our sympathies be spread upon the records of this Society, a copy be furnished the Journal of the Missouri State Medical Association, and a copy be furnished the family of our deceased brother.

## JAMES THORNTON MATSON, M. D.

Dr. James Thornton Matson was born near Frankford, Pike County, Missouri, December 1st, 1821, son of Enoch and Jane Shobe Matson, died at his home near Louisiana, Mo., October 22d. He was educated in the primitive schools of that day and lived with his parents on the farm until his majority. He followed farming until 1847, when the gifted Dr. Jno. C. Wilborne located at Frankford and prevailed on him to study medicine under his preceptorship. He attended two courses

of lectures in the Missouri Medical College in St. Louis, graduating in 1849. He practiced one year with Dr. Wilborne, then located at Saverton, Ralls County, where he enjoyed a large and lucrative practice until 1864, when he gave up medicine and with the late James V. Rogers, of Palmyra, purchased the Broadway Stock Yards in St. Louis. In 1869 he sold out his stock yards and moved to his farm in Pike County where he lived continuously until his death.

Dr. Matson was elected a member of the Missouri Constitutional Convention of 1861 representing Marion, Ralls and Monroe Counties. He was recognized as a man of more than ordinary ability; what he lacked in book learning was fully compensated for by his strong native intellect. He was married in 1849 to Elizabeth Virginia Donnelly, daughter of Colonel Peter Donnelly, of Tennessee.

# CONSTITUTION AND BY-LAWS OF THE MISSOURI STATE MEDICAL ASSOCIATION.

ADOPTED 1903.

## CONSTITUTION.

### ARTICLE I.—NAME OF THE ASSOCIATION.

The name and title of this organization shall be the Missouri State Medical Association.

### ARTICLE II.—PURPOSES OF THE ASSOCIATION.

The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Missouri, and to unite with similar Associations in other States to form the American Medical Association, with a view to the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard of medical education, and to the enactment and enforcement of just medical laws; to the promotion of friendly intercourse among physicians, and to the guarding and fostering of their material interests; and to the enlightenment and direction of public opinion in regard to the great problems of State medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public in the prevention and cure of disease, and in prolonging and adding comfort to life.

### ARTICLE III.—COMPONENT SOCIETIES.

Component Societies shall consist of those county medical societies which hold charters from this Association.

### ARTICLE IV.—COMPOSITION OF THE ASSOCIATION.

SECTION 1. This Association shall consist of Members, Delegates and Guests.

SEC. 2. MEMBERS. The Members of this Association shall be the members of the component county medical societies.

SEC. 3. DELEGATES. Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

SEC. 4. GUESTS. Any distinguished physician not a resident of this State may become a guest during any Annual Session upon invitation of the officers of this Association, and shall be accorded the privilege of participating in all of the scientific work for that Session.

### ARTICLE V.—HOUSE OF DELEGATES.

The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies, and (2), *ex-officio*, the officers of the Association as defined in this Constitution.

### ARTICLE VI.—SECTIONS AND DISTRICT SOCIETIES.

The House of Delegates may provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

### ARTICLE VII.—SESSIONS AND MEETINGS.

SECTION 1. The Association shall hold an Annual Session, during which there shall be held daily General Meetings, which shall be open to all registered members, delegates and guests.

SEC. 2. The time and place for holding each Annual Session shall be fixed by the House of Delegates.

### Article VIII.—Officers.

Section 1. The officers of this Association shall be a President, five Vice-Presidents, a Secretary, a Treasurer, a Chairman and Vice-Chairman of each Section, a Secretary of each Section who shall be an Assistant Secretary of the Association, and twenty-nine Councilors more or less, as shall be determined by the House of Delegates from time to time.

Sec. 2. The President and Vice-Presidents shall be elected for a term of one year. The Secretary and the Treasurer shall be elected by the Council at its annual meeting and each shall hold his office for one year. The Councilors shall be elected for terms of five years each, being so divided that one-fourth of the number shall be elected each year. Section officers shall be elected by the members registered in the Section and shall serve for a term of one year each. All these officers shall serve until their successors are elected and installed.

Sec. 3. The Vice-Presidents, Councilors and Members of the Committee on Public Policy and Legislation shall be elected by the House of Delegates on the morning of the last day of the annual session, but no Delegate shall be eligible to any office named in the preceding section except that of Councilor, Chairman, Vice-Chairman or Secretary of a Section; and no person shall be elected to any office who is not in attendance on that annual session and who has not been a member of the Association for the past two years.

Sec. 4. The President and the Orators shall be elected by the General Assembly on the morning of the last day of the meeting.

### Article IX.—Funds and Expenses.

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by an equal per capita assessment upon each county society to be fixed by the House of Delegates, by voluntary contribution, and from the profits of its publications. Funds may be appropriated by the House of Delegates to defray the expenses of the Annual Sessions, for publication, and for such other purposes as will promote the welfare of the Association and profession.

### Article X.—Referendum.

The General Meeting of the Association may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, and the House of Delegates may, by a similar vote of its own members, or after a like vote of the General Meeting, submit any such question to the membership of the Association for a final vote; and if the persons voting shall comprise a majority of all the members present, a majority of such vote shall determine the question, and be binding upon the House of Delegates.

### Article XI.—The Seal.

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

### Article XII.—Amendments.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at that Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

## BY-LAWS.

### Chapter I.—Membership.

Section 1. All members of Component Societies shall be privileged to attend all meetings and take part in all of the proceedings of the Annual Sessions, and shall be eligible to any office within the gift of the Association.

SEC. 2. The name of a physician upon the properly certified roster of members, or list of delegates, of a component society which has paid its annual assessment, shall be *prima facie* evidence of his right to register at the annual session in the respective bodies of this Association.

SEC. 3. No person who is under sentence of suspension or expulsion from any component society of this Association, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take any part in any of its proceedings until such time as he has been relieved of such disability.

SEC. 4. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member or delegate shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

CHAPTER II.—ANNUAL AND SPECIAL SESSIONS OF THE ASSOCIATION.

SECTION 1. The Association shall hold an annual session at such time and place as has been fixed at the preceding annual session or as fixed by this Constitution and By-Laws.

SEC. 2. Special sessions of either the Association or of the House of Delegates shall be called by the President at his discretion or upon petition of twenty delegates.

CHAPTER III.—GENERAL MEETINGS.

SECTION 1. The General Meetings shall include all registered members, delegates and guests, who shall have equal rights to participate in the proceedings and discussions, and, except guests, to vote on pending questions. Each General Meeting shall be presided over by the President, or in his absence or disability, or by his request, by one of the Vice-Presidents. Before it, at such time and place as may have been arranged, shall be delivered the annual address of the President and the annual orations, and the entire time of the session so far as may be shall be devoted to papers and discussions relating to scientific medicine.

SEC. 2. The General Meeting shall have authority to create committees or commissions for scientific investigations of special interest and importance to the profession and public, and to receive and dispose of reports of the same; but any expense in connection therewith must first be approved by the House of Delegates.

SEC. 3. Except by special vote, the order of exercises, papers and discussions as set forth in the official program shall be followed from day to day until it has been completed.

SEC. 4. No address or paper before the Association, except those of the President and Orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject.

SEC. 5. All papers read before the Society shall be its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

CHAPTER IV.—HOUSE OF DELEGATES.

SECTION 1. The House of Delegates shall meet annually at the time and place of the annual session of the Association, and shall so fix its hours of meeting as not to conflict with the first General Meeting of the Association, or with the meeting held for the address of the President and the annual orations, and so as to give delegates an opportunity to attend the other scientific proceedings and discussions so far as is consistent with their duties. But if the business interests of the Association and profesion require, it may meet in advance, or remain in session after the final adjournment of the General Meeting.

SEC. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every 50 members, and one for each major fraction thereof, but each county

society holding a charter from this Association, which has made its annual report and paid its assessment as provided in this Constitution and By-Laws, shall be entitled to one delegate.

Sec. 3. A majority of the registered delegates present shall constitute a quorum, and all of the meetings of the House of Delegates shall be open to members of the Association.

Sec. 4. It shall, through its officers, council and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping-stone to future ones of higher interest.

Sec. 5. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public-health legislation, and to diffuse popular information in relation thereto.

Sec. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every physician in every county of the State who can be made reputable has been brought under medical society influence.

Sec. 7. It shall encourage post-graduate and research work, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

Sec. 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Sec. 9. It shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

Sec. 10. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies, and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

Sec. 11. It may divide the counties of the State into Councilor Districts.

Sec. 12. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates, and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Sec. 13. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Sec. 14. It shall present a summary of its proceedings to the last general meeting of each annual session, and shall publish the same in the transactions.

### Chapter V.—Election of Officers.

Section 1. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect.

Sec. 2. The President on the first day of the annual session shall select a Committee on Nominations consisting of ten delegates, no two of whom shall be from the same councilor district. It shall be the duty of this committee to consult with the members of the Association and to hold one or more meetings at which the best interests of the Association and of the profession of the State for the ensuing year shall be carefully considered. The committee shall report the result of its deliberations to the House of Delegates in the shape of a ticket containing the name of one member for each of the offices to be filled by the House of Delegates at that annual session.

SEC. 3. The report of the Nominating Committee and the election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the General Session.

SEC. 4. Nothing in this article shall be construed to prevent additional nominations being made by members of the House of Delegates.

SEC. 5. Each section shall elect its own officers, consisting of a Chairman, a Vice-Chairman and a Secretary.

SEC. 6. Nominations for President and Orators shall be made in the General Assembly on the morning of the last day of the annual meeting.

## CHAPTER VI.—DUTIES OF OFFICERS.

SECTION 1. The President shall preside at all meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for; shall deliver an annual address at such time as may be arranged; shall give a deciding vote in case of a tie, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

SEC. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of his death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.

SEC. 3. The Treasurer shall give bond for the trust reposed in him whenever the House of Delegates shall deem it requisite. He shall demand and receive all funds due the Association, together with the bequests and donations. He shall, under the direction of the House of Delegates, sell or lease any estate belonging to the Association, and execute the necessary papers; and shall, in general, subject to such direction, have the care and management of the fiscal affairs of the Association. He shall pay money out of the Treasury only on a written order of the Chairman of the Judicial Council countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands. He shall charge upon his books the assessments against each component county society at the end of the fiscal year, which shall be December 31st; he shall collect and make proper credits for the same, and perform such other duties as may be assigned to him.

SEC. 4. The Secretary shall attend all meetings of the Association and of the House of Delegates, and he shall keep minutes of their respective proceedings in separate record books. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall provide for the registration of the members and delegates at the annual sessions. He shall keep a card index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association for publication. In so far as it is in his power he shall use the printed matter, correspondence and influence of his office to aid the Councilors in the organization and improvement of the county societies, and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council or the House of Delegates. He shall annually make a report of his doings to the House of Delegates.

In order that the Secretary may be enabled to give that amount of time to his duties which will permit of his becoming proficient,

it is desirable that he should receive some compensation. The amount of his salary shall be fixed by the House of Delegates.

SEC. 5. The Secretaries of the Sections shall act as Assistant Secretaries of the Association.

## CHAPTER VII.—COUNCIL.

SECTION 1. The Council shall hold daily meetings during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Councilors. It shall meet on the last day of the annual session of the Association for reorganization and for the outlining of work for the ensuing year. At this meeting it shall elect a Chairman and Secretary, and the latter shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided. It shall be the Executive Committee of the Association and shall act for the Association during the interval between meetings.

SEC. 2. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exists, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his doings, and of the condition of the profession of each county in his district to each annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the House of Delegates upon a proper itemized statement, but this shall not be construed to include his expense in attending the annual session of the Association.

SEC. 3. Collectively the Council shall be the Board of Censors of the Association. It shall consider all questions involving the rights and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or of a county society, upon which an appeal is taken from the decision of an individual Councilor. Its decision in all such cases shall be final.

SEC. 4. The Council shall provide and superintend the publication and distribution of all proceedings, transactions and memoirs of the Society, and shall have authority to appoint an editor and such assistants as it deems necessary. Further, to facilitate this work, it shall be the duty of the Secretaries of the Sections, during each Annual Session, or as soon thereafter as practicable, to deliver to the editor, or his duly appointed agent, all such proceedings, reports, addresses, papers and other documents, as may have been ordered for publication. All money received by the Council, or its agents, resulting from the discharge of the duties assigned to them, must be paid to the Treasurer of the Society, and all orders on the Treasurer for disbursements of money in any way connected with the work of publication must be indorsed by the Chairman of the Council and countersigned by the President and the Secretary of the Society. All matters of the Society pertaining to the expenditure of money for other purposes shall be referred, during the annual session, to the Council, who shall report upon the same within twelve hours, and if the House of Delegates orders the expenditure of money in connection with said report, the payment shall be made by the Treasurer as provided above. It shall be the further duty of the Council to hold the official bond of the Treasurer for the faithful execution of his office, annually to audit and to authenticate his accounts, and to present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Society during the year, and the amount of all other property belonging to the Society under its control, with such suggestions as it may deem necessary.

In the event of a vacancy in the office of the Secretary of the Society, or the Treasurer, the Chairman of the Council shall fill the vacancy ad interim until the next meeting of the Council.

SEC. 5. The Council shall have the right to communicate the views of the profession and of the Association in regard to health, sanitation and other important matters to the public and the lay press. Such communications shall be officially signed by the Chairman and Secretary of the Council, as such.

### CHAPTER VIII.—COMMITTEES AND SECTIONS.

SECTION 1. The standing committees shall be as follows:
A Committee on Scientific Work.
A Committee on Public Policy and Legislation.
A Committee on Nominations.
A Committee on Arrangement, and such other Committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

SEC. 2. The Committee on Scientific Work shall consist of the Chairman and Secretaries of the various Sections. It shall determine the character and scope of the scientific proceedings of the Association for each session, subject to the instructions of the House of Delegates, or of the Association, or to the provisions of the Constitution and By-Laws. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented, which order shall be adhered to by the Association as nearly practicable.

SEC. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of the public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall utilize every organized influence of the profession to promote the general influence in local, State and national affairs and elections. Its work shall be done with the dignity becoming a great profession, and with that wisdom which will make effective its power and influence. It shall have authority to be heard before the entire Association upon questions of great concern at such time as may be arranged during the annual session.

SEC. 4. The Committee on Nominations shall be appointed and perform its duties in accordance with the provisions of Chapter V, Sections 2 and 3 of these By-Laws.

SEC. 5. The Committee of Arrangements shall consist of the component society in the territory in which the annual session is to be held. It shall, by committees of its own selection, provide suitable accommodations for the meeting places of the Association and of the House of Delegates and of their respective committees, and shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

SEC. 6. Duties of Officers of Sections. The Chairman shall preside at the meetings of the Section and shall perform such duties as usually belong to such an office, or as may be provided by the rules and regulations of the Section. The Vice-Chairman shall assist the Chairman in the performance of his duties and shall preside in his absence or at his request. The Secretary shall keep a record of the proceedings of the Section in a book provided for that purpose, and shall perform such other duties pertaining to his office as may be imposed by the rules and regulations of the Section and the By-Laws of the Association.

### CHAPTER IX.—ASSESSMENTS AND EXPENDITURES.

SECTION 1. An assessment of two dollars ($2.00) per capita on the membership of the component societies is hereby made the annual dues of this Association. The Secretary of each county

society shall forward its assessment together with its roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Association on or before December 31st in advance of each annual session.

SEC. 2. Any county society which fails to pay its assessment, or make the reports required, on or before the date above stated, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or the House of Delegates until such requirements have been met.

SEC. 3. All motions or resolutions appropriating money shall specify a definite amount, or so much thereof as may be necessary for the purpose indicated, and must be approved by the Council and House of Delegates on a call of the ayes and noes.

### CHAPTER X.—RULES OF CONDUCT.

The principles set forth in the Code of Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

### CHAPTER XI.—RULES OF ORDER.

The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, unless otherwise determined by a vote of its respective bodies.

### CHAPTER XII.—COUNTY SOCIETIES.

SECTION 1. All county societies now in affiliation with this Association or those that may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, upon application to the Council, receive a charter from and become a component part of this Association.

SEC. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

SEC. 3. Charters shall be issued only upon approval of the Council or House of Delegates and shall be signed by the President and Secretary of this Association. The Council or House of Delegates shall have authority to revoke the charter of any component county society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the District if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 5. Each county society shall judge of the qualification of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who is practicing, or who will agree to practice, non-sectarian medicine shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

SEC. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right of appeal to the Council and to the House of Delegates.

SEC. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8. When a member in good standing in a component society moves to another county in this State, his name, upon request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 9. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

SEC. 10. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

SEC. 11. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall be especially encouraged to do post-graduate and original research work, and to give the society the first benefit of such labors. Official position and other preferments shall be unstintingly given to such members.

SEC. 12. At some meeting in advance of the annual session of this Association each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Association, in the proportion of one delegate to each fifty (50) members, or major fraction thereof, and the Secretary of the society shall send a list of such delegates to the Secretary of this Association, at least ten days before the annual sessions.

SEC. 13. The Secretary of each county society shall keep a roster of its members, and a list of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information, upon blanks supplied him for the purpose, to the Secretary of this Association, on or before December 31st, in advance of each annual session, and at the same time that the dues accruing from the annual assessment are sent in. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

## CHAPTER XIII.—ENTERTAINMENTS.

No official entertainment shall be accepted by this Association during its annual sessions.

## CHAPTER XIV.—AMENDMENTS.

These By-Laws may be amended at any annual session by a majority vote of all the delegates present at that session, after the amendment has laid upon the table for one day.

Emergency clause provides for immediately going into effect after adoption.

## PROCEEDINGS OF THE THIRD ANNUAL MEETING OF THE MEDICAL ASSOCIATION OF THE SOUTHWEST AT KANSAS CITY, MO., OCTOBER 19TH TO 21ST, 1908.

*Coates House, October 19th.* A meeting of the Executive Committee with the following members present: Drs. B. J. Vance, L. H. Buxton, J. Johnson, G. H. Moody, W. H. Cary, Dr. John Punton, Chairman of the Committee of Arrangements, President Thomas E. Holland and F. H. Clark.

The Secretary presented the application of Dr. J. Ree Lytle of Kansas, who was not a member of the State Association because his County Association was not affiliated with the State Association, but asked membership in the Medical Association of the Southwest. Application was rejected and the Secretary instructed to write him that according to the constitution, none but members of the component State Associations in good standing could become members of this Association.

On motion of Dr. Punton, duly seconded and carried, the rule was adopted that during this meeting papers should be read alternately from each section.

The Chairman of the Committee outlined the arrangements made by the Committee for the meeting, including the social features, which included a dinner for the visiting ladies and their husbands; an automobile ride for the physicians as well as for the ladies, and a smoker for the men.

The Secretary-Treasurer presented his report for the year giving a brief synopsis of the effort made to reach and interest all the members of the profession in the five component states. The present membership numbers 580 which was a very satisfactory gain during the past year.

The financial report shows:

| | |
|---|---|
| Total receipts during the year | $653.29 |
| Total disbursements for same time | 622.35 |
| Balance on hand | $30.94 |
| Total outstanding bills unpaid | $91.25 |

An auditing committee consisting of Drs. E. H. Cary, John Punton and the Secretary were appointed to audit the books and accounts and after reporting that they found the accounts and books correct the report was accepted and ordered spread on the minutes.

A letter from Dr. Herbert L. Burrell, President of the A. M. A., regretting his inability to be present and wishing the Association a very prosperous year and a good meeting, was read and ordered read to the Association at one of the general meetings.

The president addressed the committee at length regarding the necessity for hearty coöperation on the part of the state journals if we

are to make this Association a success and was authorized to appoint a publication committee consisting of one from each state who is a member of the executive committee to devise ways and means to accomplish this result.

The meeting then adjourned to meet at 12:00 o'clock M. Tuesday, October 20th.

*Casino Hall, October 19th, 2:00 P. M.* General meeting called to order by the Chairman of the Committee of Arrangements, Dr. John Punton of Kansas City, Missouri, who announced that Mayor Thos. T. Crittenden who was to deliver the address of welcome was unavoidably detained, and then introduced Dr. Jabez N. Jackson who, in a few well chosen words, gave a cordial welcome to the visiting physicians and their wives in behalf of the profession, of Missouri and of Kansas City. Dr. Punton then announced that immediately after the adjournment of this session the visiting physicians were invited to become the guests of the physicians of Kansas City and enjoy an automobile ride over the beautiful parks and boulevards of Kansas City. He then introduced the President, Dr. Thomas E. Holland of Hot Springs, who called upon the following to respond to the words of welcome for their respective states: For Arkansas, Dr. C. T. Drennan of Hot Springs; for Oklahoma, Dr. A. K. West of Oklahoma City; for Missouri, Dr. C. W. Fassett of St. Joseph; for Kansas, Dr. Geo. M. Gray of Kansas City, Kan.; and for Texas, Dr. Joe Becton of Greenville.

Meeting then adjourned until 8:00 o'clock P. M.

*Coates House, October 19th, 9:00 P. M.* Meeting called to order by Vice-President S. S. Glasscock, who introduced the President, who delivered his annual address, in which he dealt particularly with the birth, origin and need of this association. Meeting then adjourned to take up the scientific program at 9:00 o'clock A. M., Tuesday morning.

The following were appointed as members of the Nominating Committee: From Kansas—Drs. Geo. M. Gray, C. C. Goddard, Noah Hays, Hugh B. Caffey and S. S. Glasscock. From Oklahoma—Drs. M. A. Kelso, A. K. West, H. C. Reed, R. V. Smith and S. M. Jenkins. From Texas—Drs. F. D. Boyd, Joe Becton, E. H. Cary, D. Strickland and Bacon Saunders.

*Casino Hall, October 20th, 9:00 A. M.* Meeting called to order by Vice-President S. S. Glasscock, who introduced Dr. Bacon Saunders. Dr. Saunders read the Chairman's address of the Section on Surgery, which was followed by the Chairman of the Section on General Medicine, Dr. F. B. Young, and who was followed by Dr. L. H. Buxton, Chairman of the Section on Eye, Ear, Nose and Throat. Dr. S. S. Glasscock then introduced the Hon. T. T. Crittenden, Mayor of Kansas City, who briefly welcomed the visitors to Kansas City.

Dr. Punton announced that at 2:00 P. M. the committee to entertain the visiting ladies would take them for an automobile ride around the boulevards, stopping for tea at the Country Club. Also that the visiting

physicians would be entertained with a smoker in the Coates House Tuesday evening at 8:00 P. M.

The Secretary reported that since the meeting of the Association at Hot Springs about 150 new members had applied for admission to the Society, all of whom represented themselves to be in good standing as members of their respective state association. Upon motion the reading of the names was dispensed with and the Secretary instructed to enroll them as members.

*Coates House, Parlor A, October 20th, 12:00 M.* Meeting of the Executive Committee called to order by the Chairman, T. E. Holland, with the following members present: G. H. Moody, John Punton, L. H. Buxton, B. J. Vance, Bransford Lewis, C. T. Drennon, LeRoy Long and F. H. Clark.

A free discussion regarding the work of the Publication Committee was indulged in and the president announced as the committee for the coming year the following: For Arkansas—Dr. C. T. Drennon. For Missouri—Dr. Bransford Lewis. For Oklahoma—Dr. L. H. Buxton. For Kansas—Dr. Geo. M. Gray. For Texas—Dr. G. H. Moody.

The publication committee was then instructed to meet at 5:15 Tuesday afternoon.

Committee then adjourned to meet Tuesday evening at 8:00 o'clock.

*Coates House, October 20th, 8:00 P. M.* Meeting of the executive committee called to order and the Secretary who had been authorized to prepare and present the report of the executive committee presented the report, which embodied the portions of the report already presented by the Secretary showing the present membership and the financial items; the report showed the effort made to interest all the county officers in the five states and the effort made to secure their attendance at this meeting and recommended that the effort be renewed next year; it also contained the report of the special committee appointed to attend the annual meeting of the A. M. A. at Chicago and ask for recognition as a Branch Association and reported that that had been formally promised by Dr. J. N. McCormick at that time. It also mentioned the need for more thoroughly presenting the aims and needs of this association to the profession at large through the different state journals and recommended that this matter be urged and an active campaign be carried forward in this department. The question for consideration then was whether the association should next year have general sessions as had been arranged for this year and the recommendation was then made that there be only two general sessions at the next annual meeting with the remaining session divided up into sections for scientific work.

After accepting the above report and authorizing the Secretary to present the same at the general session Wednesday morning, the Committee adjourned to meet Wednesday after the election of the new officers, at 12:00 o'clock M.

*Casino Hall, October 21st, 9:00 A. M.* Meeting of the Association called to order by President Holland. Dr. Geo. M. Gray of Kansas City, Kan., then presented the following resolution, which, upon motion, duly seconded and carried, was unanimously adopted:

"Resolved, That the Medical Association of the Southwest approves the efforts of the graduate trained nurse to raise the standard of education and obtain proper recognition through registration."

(Signed) GEO. M. GRAY.

The report of the executive committee, as outlined elsewhere, was presented, which, upon motion duly seconded and carried, was adopted and ordered spread on the minutes.

The following resolutions were then presented by Dr. E. H. Martin of Hot Springs, Arkansas:

WHEREAS, the tendency of physicians and charitable organizations over the country is even now to send advanced, indigent consumptives from their homes to climatic resorts, notably parts of Texas, Colorado and the Southwest; and,

WHEREAS, the consensus of opinion among the best authorities is that climate alone cannot cure tuberculosis; and,

WHEREAS, boarding houses and hotels in many resorts no longer open their doors to this class of people, thereby depriving them of any chance of securing proper accommodations; and,

WHEREAS, the sanitariums and eleemosynary institutions of the Southwest are already overburdened with such cases and the people are called upon to double duty in that they must take care of others beside their own consumptives;

THEREFORE, Be it Resolved, that all states and territories throughout the country, and all physicians and charitable organizations be urged to discourage the aimless drifting of the average consumptive and that all advanced consumptives be kept within the confines of their own city, county or state, and that the legislatures of the several states be urged to pass such laws as will insure the building and maintenance of sanitariums for curable cases and hospitals for advanced and incurable cases.

(Signed) E. H. MARTIN.

On motion seconded and duly carried the above resolutions were unanimously adopted. The Secretary was also authorized to notify the Secretary of each State Association of this action.

The report of the Nominating Committee was then presented, placing in nomination for the office of president for the coming year, Drs. Jabez N. Jackson of Kansas City, Missouri, and S. S. Glasscock, of Kansas City, Kansas. Upon motion of Dr. Glasscock duly seconded and carried the rules were suspended and the Secretary was instructed to cast the unanimous vote of the Association for Dr. Jackson for president

for the ensuing year. The Secretary then announced that he had cast 243 votes for Dr. Jackson for President and the President declared Dr. Jackson duly elected.

The Committee then nominated for vice presidents for the ensuing years, Drs. D. L. Perry, Parsons, Kansas; M. A. Kelso, Enid, Oklahoma; Joe Becton, Greenville, Texas, and St. Cloud Cooper of Fort Smith, Arkansas. Upon motion the rules were suspended and, as before, the Secretary instructed to cast the unanimous ballot for each of the above. The Secretary then announced the ballot and the president declared each elected.

The Nominating Committee then presented the name of Dr. F. H. Clark of El Reno, Oklahoma, for Secretary-Treasurer for the coming year and upon motion the Secretary of the Nominating Committee was instructed to cast the unanimous vote of the association for Dr. Clark for Secretary-Treasurer, and the President declared him elected.

Dr. Bacon Saunders then moved that a rising vote of thanks be tendered the Secretary for his services in behalf of the Association during the past year, which was unanimously carried. After, the Secretary in a few words thanked the Association for the honor they had conferred and pledged his best efforts in the year to come.

The President then appointed a committee of two to wait upon the president-elect and inform him of his election and escort him to the platform, Drs. Bacon Saunders and C. W. Fassett. Dr. Bacon Saunders presented the following resolutions, which were unanimously adopted by a rising vote:

> In view of the unbounded hospitality and the ample facilities afforded this Association at this meeting for the comfort, pleasure and delectation of its members, Therefore,
>
> Be It Resolved, that the thanks and sincere appreciation of the Medical Association of the Southwest, be expressed by a rising vote to the profession of Kansas City, to its Committee of Arrangements, and to all those who have in any way contributed to the royal greeting and lavish hospitality extended to us during this meeting;
>
> And especially do words fail us when we attempt to voice the gratitude of our hearts for the very great courtesy shown in providing such unfailing means for the pleasure and happiness of the visiting ladies. They must be a gentle and hospitable people indeed who care so well for the strangers within their gates.
>
> Here's to the City by the Kaw—may her longevity and prosperity be as boundless as her hospitality.
>
> (Signed) Bacon Saunders.

The President elect, Dr. Jabez N. Jackson, was then installed into office and addressed the Association, setting forth briefly the aims and ambitions for the coming year and asking for the same loyal support that had been accorded his predecessor.

The following members of the Executive Committee were then elected to serve for three years: Dr. B. J. Vance, Checotah, Oklahoma; Dr. J. D. Riddell, Enterprise, Kansas; Dr. E. H. Martin, Hot Springs, Arkansas; Dr. C. W. Fassett, St. Joseph, Missouri; Dr. D. Strickland, Cleburne, Texas.

The Nominating Committee then presented San Antonio, Texas, as the next place of meeting which was upon motion duly selected and the meeting adjourned to finish the scientific session.

F. H. CLARK, M. D.,
Secretary-Treasurer.

Section officers for the ensuing year:

*Section Surgery:* Chairman, Dr. J. A. Foltz, Fort Smith, Arkansas. Vice Chairman, Dr. R. H. Barnes, St. Louis, Missouri. Secretary, Dr. E. H. Martin, Hot Springs, Arkansas.

*Section on General Medicine:* Chairman, Dr. A. K. West, Oklahoma City, Oklahoma. Vice Chairman, Dr. G. H. Moody, San Antonio, Texas. Secretary, Dr. Louis M. Warfield, St. Louis, Missouri.

*Section on Eye, Ear, Nose and Throat:* Chairman, Dr. F. D. Boyd, Fort Worth, Texas. Vice Chairman, Dr. J. F. Gsell, Wichita, Kansas. Secretary, Dr. A. W. McAlester, Kansas City, Missouri.

# COUNTY SOCIETY NOTES

## CAPE GIRARDEAU COUNTY MEDICAL SOCIETY.

The Cape Girardeau County Medical Society held its regular monthly meeting Friday, November 6th, at Cape Girardeau. Ten members were present. After transacting the usual business, the program followed.

Report of surgical cases in practice: Dr. J. D. Porterfield, Jr., reported several cases of ovarian cyst. Dr. G. B. Schulz reported three cases, one of psoas abscess with recovery; second, implantation cyst, following trauma; third, a case of necrosis of the tibia, resulting in amputation.

Report of nose and throat cases: Dr. H. L. Cunningham drew attention to the importance of recognizing adenoids and their treatment, and reported a case of nasal polypus.

Report of eye cases: Dr. W. E. Yount reported a case of injury to the eyes by lye caused by one child pouring the contents of a can of lye into the eyes of a 5 months' old child. He also spoke of the transmission of eye affections from one person to another due to carelessness. All reports brought out good discussion.

This is the second time in the history of the society that the full program as prepared by the committee was rendered. The members in general have not taken the interest in society work that they should. —E. H. G. Wilson, M. D., Secretary.

## CLINTON COUNTY MEDICAL SOCIETY.

The Clinton County Medical Society met in Perrin, November 10, 1908. The following members were present: Drs. J. T. Kimsey, A. W. Robertson, C. M. McConkey, R. W. Rea, J. O. K. Gant, Frank Fulton, Jno. Sturgis, John Kay, and P. M. Steckman. In the absence of the president, Vice-president Rea called the meeting to order.

Three excellent papers were read and thoroughly discussed, as follows: "The Progress of Medical Science," by Dr. John Sturgis; "Preventive Medicine," by Dr. R. W. Rea; "Does the Profession Use Tonics as in Other Days," by Dr. J. T. Kimsey.

Resolutions, urging our representative in legislature to use his best influence for securing the passage of the amendment to the law governing criminal abortion, as recommended by the Committee on Public Policy and Legislation of the Missouri State Medical Association, were adopted.

The next meeting is to be a business meeting and will be held in Plattsburg in December.—P. M. Steckman, M. D., Secretary.

## COOPER COUNTY MEDICAL SOCIETY.

The Cooper County Medical Society, upon the invitation of Dr. H. V. Cordry, Resident Physician, met at the State Training School for Boys in Boonville, Mo., on Tuesday, November 10th.

Members present: Drs. H. V. Cordry, R. L. Evans, R. L. Fogle, J. S. Parrish, F. R. Smiley, A. E. Monroe, J. R. Lionberger. Dr. H. H. Smiley, of Texarkana, was present as a guest of the Society.

After an elegant dinner in the officers' dining room, at which Dr. and Mrs. Cordry presided, the Society met in regular session at the Hospital of the Training School. Dr. Cordry presented a case of leg ulcer which had resulted from an injection of sulphate of quinine in a patient suffering from a severe attack of malaria. The ulcer was all that remained of a deep abscess of the thigh; the abscess developed last July at the time of the injection of the quinine. Dr. Evans presented a mucous cyst which had precipitated labor in a multipara at the third month; the cyst was found presenting at the os of the uterus after the fetus had been expelled and it is presumed that the cyst had hastened the expulsion of the product of conception.

After the presentation and discussion of the above and other cases, the Secretary read a letter from Dr. J. N. McCormack, of Kentucky, Chairman of the Committee of Organization of the A. M. A. Dr. McCormack asked the support of the Society in securing a National Department of Public Health, and requested that the Society act through its Congressman. After the reading of the letter the Society adopted the following resolution:

"In view of the efforts being put forth by the Committee of One Hundred, as outlined by Dr. McCormack, for the purpose of bringing about the establishment of a National Health Bureau, Be it Resolved, That We, the members of the Cooper County Medical Society, do heartily endorse such effort, and that we pledge this Society to cooperation along that line so far as may be in our power through our national representative in Congress.

J. S. Parrish,
A. E. Monroe,
F. R. Smiley,
Committee.

The President instructed the Secretary to communicate with the Congressman of this district and to ask his support in the above measure.

As the local expenses of the Society are nominal, the Society voted to reduce the local dues to fifty cents per annum.

A vote of thanks was extended to Dr. and Mrs. Cordry and to the Superintendent of the Training School, Major Clark, for the hospitality extended to the Society.

It was decided to take up the diseases of the respiratory tract at the next meeting of the Society, and at subsequent meetings to discuss diseases prevalent at the time and season.

The Society then adjourned to meet December 1st, 1908.—Jno. R. Lionberger, M. D., Secretary.

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## HALL COUNTY MEDICAL SOCIETY.

The Hall County Medical Society met at Maitland, November 5th. Owing to the inconvenience of reaching Maitland by railroad from some parts of the county the attendance was not so large as usual.

Dr. Proud read a paper on "Tetanus," reporting four cases with the history of each case. Questions pertaining to the welfare of the pro-

fession were taken up and much time was given to the discussion thereof. The next meeting will take place at Forest City, January 7.—J. F. CHANDLER, M. D., Secretary.

## LIVINGSTON COUNTY MEDICAL SOCIETY.

The Livingston County Medical Society met in regular session at Chillicothe, November 11th.

Dr. Thos. E. Graham, of Chula, recently of St. Louis, was admitted to membership by transfer card from the St. Louis Medical Society. Dr. Graham has for four years been connected with the St. Louis City Hospital and City Dispensaries, and has just recently located in this county, and we welcome him in our Society. We bespeak for him success in his chosen field and hope he will prove a valuable addition to the profession in this community.

Dr. G. W. Carpenter, of Utica, also became a member of the Society and was given a hearty welcome.

Dr. Graham read a very interesting paper on the use of antitoxin in city dispensaries, and methods used in preventing the spread of contagious diseases in cities. The paper was freely discussed by those present.

Dr. W. R. Simpson gave the history of three cases of ulcer of the stomach occurring recently in his practice, death resulting in a few hours.

Under the head of miscellaneous business the Society put itself on record as favoring the advance medical legislation advocated by the State Board, and each member pledged himself to urge his senator and representative to favor such legislation as might be offered by the legislative committee.

The Society adjourned to meet in January, when officers will be elected for the coming year.—J. C. SHELTON, M. D., Secretary.

## MADISON COUNTY MEDICAL SOCIETY.

The Madison County Medical Association held a very interesting session Tuesday evening, November 15th. The following members were present: Drs. O. Haley, C. A. Anthony, S. C. Slaughter, J. H. Greenwood, Wm. Nifong, Chas. U. Davis and Jno. K. Smith.

The program consisted of a paper entitled, "Ergot, Its Uses and Abuses," by Dr. Wm. Nifong. The Society commended Dr. Nifong for his care in getting up this paper. It was discussed freely by the members and all received benefit therefrom.

A reported case of penetrating gun-shot wound of the skull, by Dr. Greenwood, caused a free discussion on the question whether or not to probe a cavity. (What is the feeling of the editor, yes or no?)

The Society adjourned to meet the first Tuesday in January.—JNO. K. SMITH, M. D., Secretary.

Note: Generally in penetrating wounds of the skull due to bullets the injury inflicted when the blow is received is the main consideration, and the missile becomes of more or less secondary importance. Operation if done shortly after the injury is not primarily to remove the bullet, but to relieve conditions in the cranium, resulting from the injury, such as hemor-

rhage, with or without increased intracranial pressure, depressed fractures, etc. If the bullet can be seen during these manipulations, remove it, otherwise it is better to determine its exact location later by the X-ray, and then if it is in a "silent" area it is best left. It is best not to further injure a lacerated brain by probing. M. B. C.

## PETTIS COUNTY SOCIETY.

Pettis County Medical Society met in regular session on November 9th. There was a good attendance of the members.

Dr. M. C. Alderman read an interesting paper on "Surgical Diagnosis." Dr. Ferguson opened the discussion and was followed by a number of the other members.

## RAY COUNTY MEDICAL SOCIETY.

The Ray County Medical Society held its regular bi-monthly meeting at Richmond, Wednesday, November 18th. After partaking of an excellent dinner at the Hotel Richmond, the members and visiting physicians repaired to the hotel parlors for the transaction of business and rendition of the program. Roll call showed the following members present: Drs. Greene, Hamilton, Ball, Shotwell, Smith, Higdon and McGaugh, of Richmond; Drs. Cook and Rentfro, of Rayville; Dr. Ellis, of Orrick; Dr. Etherton, of Camden; Dr. Joiner, of Knoxville; and Dr. Major, of Hardin. Visitors: Drs. Jabez N. Jackson and Flavel B. Tiffany, of Kansas City; Dr. R. F. Cook, Carrollton, and Dr. E. H. Musson, of Norborne.

Letters were read by the secretary from Dr. J. A. B. Adcock, secretary of the State Board of Health, and from the publicity department of the American Medical Association, urging coöperation along the line of medical legislation and the suppression of quackery, which were referred to Dr. T. B. Cook, our representative in the State legislature.

Officers for the ensuing year were elected as follows: President, Elmer T. McGaugh; vice-president, Robert Sevier; secretary, Hermon S. Major; treasurer, E. F. Higdon; censors, Jas. E. Ball, Geo. W. Joiner and Emmett W. Rentfro, for the period of one, two and three years respectively. Hermon S. Major was elected delegate to the State Association for the term of two years, with Jas. W. Smith as alternate.

Dr. Jabez N. Jackson gave a very classical and practical address on "Surgical Technic." He spoke of the great progress that had been made and is still being made in the science of surgery and gave statistics showing the increased percentage of cures in cases which were once considered incurable. Dr. Jackson closed his address by making an eloquent appeal to the country practitioner to insist on the removal of all suspicious tumors and growths while they were localized, instead of letting them go until the trouble became general. Dr. R. F. Cook opened the discussion on Dr. Jackson's address. He agreed fully with everything that had been said and urged the physicians present to apply it in their practice.

Dr. Flavel B. Tiffany was called upon and responded in a few well-chosen remarks on diseases of the eye, more especially cataracts. Dr. E. H. Musson made a few remarks in the discussion of both Dr. Jackson's and Dr. Tiffany's addresses and was followed by Dr. C. B. Shotwell.

This was perhaps one of the best meetings that has been held in the history of the society and all present felt that it was good to be there. The next meeting will be held at Richmond, on the third Wednesday in January.—Hermon S. Major, M. D., Secretary.

## ST. JOSEPH-BUCHANAN COUNTY MEDICAL SOCIETY.

Regular meeting, Wednesday evening, November 11th, the president, Dr. H. S. Forgrave, in the chair.

Dr. W. E. McKinley was admitted to membership in the Society on a transfer card from Worth county.

Dr. Elam presented for consideration a copy of a bill, providing for the registration and examination of trained nurses in the State. Upon motion, this proposed bill received the unanimous endorsement of the Society.

The Symposium on Tuberculosis was then taken up, and interesting papers were read as follows:

Pathology and Bacteriology, Dr. L. J. Dandurant.

Clinical Study and Therapy, Dr. A. E. Holly.

Bovine vs. Human Tuberculosis; Governmental Duty, Dr. E. H. Bullock.

State and Municipal Control; Hygienic and Economic Aspects, Dr. E. S. Ballard.

Among those taking part in the discussion were Drs. T. H. Doyle, Levi Long, Jacob Geiger O. G. Gleaves, P. I. Leonard, A. L. Gray, C. A. Good, W. T. Elam, Stamey, Murphy, Prof. Whiteford, Superintendent Public Schools, Mr. D. W. Morrison and Mr. W. B. Kelling, member and Secretary respectively of the Board of Health.

Drs. Dandurant, Holley, Ballard, and Bullock, who represented the County, City, Board of Health, and the Society, respectively, made brief reports of the Congress on Tuberculosis which they attended in Washington.

Upon the suggestion of Prof. Whiteford, it was ordered that a conference be arranged between representatives of the Society and the Board of Education, with a view to giving addresses in the Public Schools on matters of health and prevention of disease.—Chas. Wood Fassett, M. D., Secretary.

## SCHUYLER COUNTY MEDICAL SOCIETY.

The Schuyler County Medical Society met at Lancaster, on November 11th. Dr. J. B. Bridges, vice-president, presided, the president, Dr. E. L. Mitchell, being absent. Members present: Drs. Zeber, Keller, W. F. Mitchell, J. B. Bridges and H. E. Gerwig.

A number of interesting cases were reported and discussed by all present.

The Society voted to change our regular time of meeting from semi-annually to quarterly.

Drs. W. F. Mitchell, W. H. Zeber and J. H. Keller were appointed to read papers at the next meeting. The next meeting will be held on January 12, 1909.—H. E. Gerwig, M. D., Secretary.

# ARTICLES APPROVED BY THE COUNCIL ON PHARMACY AND CHEMISTRY.

## PYRAMIDON NEUTRAL CAMPHORATE.

This compound, $(C_{13}H_{12}N_3O)_2.C_{10}H_{16}O_4$, is a neutral salt of pyramidon and camphoric acid.

Actions and Uses.—See pyramidon acid camphorate. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

## PYRAMIDON SALICYLATE.

Pyramidon salicylate, $C_{13}H_{17}N_3O.C_7H_6O_3$, is an acid salt of pyramidon and salicylic acid.

Actions and Uses.—It is antipyretic, analgesic and antiseptic, combining the activity of its components. It is recommended in rheumatic and gouty affections, neuralgia, pleuritis, etc. Dosage.—0.5 to 0.75 Gm. (8 to 12 grains) in powder or aqueous solution. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

## QUARTONOL.

A name applied to a mixture of tonols in tablets of 0.3 Gm. (5 grains), each tablet being said to contain lime tonol, 0.148 Gm. (2¼ grains), sodium tonol, 0.148 Gm. (2¼ grains), quinine tonol, 0.03 Gm. (½ grain), and strychnine tonol, 0.00033 Gm. (1-200 grain).

Actions, Uses and Dosage.—See Glycerophosphates. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

## PYRAMIDON.

Pyramidon, $C_6H_5N\begin{cases}CO\text{———}C.N(CH_3)_2\\ \quad\quad\quad\

# BOOK REVIEWS

E. B. Treat & Co., medical publishers, New York, announce, in press, for early publication, the following works:

Surgical Diseases of Children. A modern treatise on Pediatric surgery, by Samuel W. Kelley, M. D., Professor of Diseases of Children, Cleveland College of Physicians and Surgeons. This volume occupies a distinct place in medical literature as it is devoted *entirely* to the surgical diseases of children and is the first yet written by an American on the subject.

Ptomaine Poisoning. A Concise Exposition of the Etiology, Bacteriology, Pathology, Symptomatology, Prophylaxis, and Treatment of Bacterial Food Poisoning by Prof. Dr. A. Dieudonne, Munich, translated and edited, with additions, by Dr. Charles Frederick Bolduan, Bacteriologist, Research Laboratory, Department of Health, City of New York. 8vo, 125 pages, cloth, prepaid, $1.00 net.

Diagnosis and Treatment of Disorders of the Bladder, with Technique of Cystoscopy. By Follen Cabot, M. D., Professor Genito-Urinary Diseases, Post-Graduate Medical School and Hospital, New York. A manual of this phase of surgery supplementing the more pretentious volumes. 8vo, 225 pages, 40 illustrations and 1 colored plate, cloth, prepaid, $2.00 net.

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Progressive Medicine, Vol. III., September, 1908. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 285 pages, with 30 engravings. Per annum, in four cloth-bound volumes, $9.00; in paper binding, $6.00, carriage paid to any address. Lea & Febiger, publishers, Philadelphia and New York.

This volume contains the following four contributions, all dealing with topics of immediate practical importance: Diseases of the Thorax and its Viscera, by William G. Ewart, M. D.; Dermatology and Syphilis, by William S. Gottheil, M. D.; Obstetrics, by Edward P. Davis, M. D; Nervous Diseases, by William G. Spiller, M .D.

The information contained in *Progressive Medicine* places before the reader, in lucid, comprehensive and authoritative fashion, the latest opinions that obtain upon the important subjects under discussion. Much of the information contained in each issue is not available from any other source.

THE PHYSICIAN'S VISITING LIST FOR 1909. Fifty-Eighth Year of Its Publication. The dose-table has been revised in accordance with the new U. S. Pharmacopœia (1905). P. Blakiston's Son & Co., 1012 Walnut street, Philadelphia.

This has been a recognized and accepted standard visiting list by American physicians since its first issue. It has been used by most of the famous American medical men as well as by thousands of others less known to fame but who have nevertheless contributed their share to human happiness.

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THE CENTURY IN 1909 will have some remarkable articles on Lincoln, including unpublished documents from his own pen.

The great sculptor Saint-Gaudens wrote his autobiography just before he died; The Century will print it. The full report of a remarkable conversation with the German Emperor will appear in The Century, and an interview with the great pianist Paderewski. Andrew Carnegie is writing on the tariff for it. Articles by Grover Cleveland's nearest friends will tell the intimate story of his life. Mrs. Rice, the author of "Mrs. Wiggs of the Cabbage Patch," will contribute a great novel, and Thompson Seton a splendid new tale of animal life. The colored pictures will be more beautiful than ever. The Century Co., Union Square, New York.

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ST. NICHOLAS is the one great magazine for children. St. Nicholas is the loved companion of more than one hundred thousand American boys and girls. It is brimful of delightful entertainment each month, is an influence for good in your children's lives that you cannot afford to let them be without. St. Nicholas will give your children a year's voyage to Storyland, the happiness of which they will never forget. The Century Co., Union Square, New York.

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THE CURE OF RUPTURE BY PARAFFIN INJECTIONS. By Charles C. Miller, M. D. Comprising a description of a method of treatment destined to occupy an important place as a cure for rupture owing to the extreme simplicity of the technic and its advantages from an economic standpoint. Published by the author, 70 State street, Chicago. Prepaid $1.00.

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THE PRACTITIONERS' VISITING LIST FOR 1909. An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The weekly, monthly and 30-patient perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-patient perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil and rubber, and calendar for two years. Price by mail, postpaid, to any address, $1.25. Thumb-letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, publishers, Philadelphia and New York.

## AMERICAN MEDICAL ASSOCIATION.

Next Annual Meeting at Atlantic City, N. J., June 8-11, 1909.

President: HERBERT L. BURRELL, Boston.
President Elect: WM. C. GORGAS, Ancon, Panama.
Secretary and Editor: GEORGE H. SIMMONS, 103 Dearbon Ave., Chicago.

## MISSOURI STATE MEDICAL ASSOCIATION.

Next Annual Meeting, Jefferson City, May 18, 19, 20, 1909

President: A. R. KIEFFER, St. Louis.
Vice Presidents:
D. B. FARNSWORTH, Springfield; W. J. FRICK, Kansas City; J. B. NORMAN, California; C. H. DIXON, Holliday; M. A. SMITH, Gallatin.
Secretary: A. W. McALESTER, Jr., Kansas City.
Assistant Secretaries: WILLARD BARTLETT, St. Louis; W. R. PATTERSON, Tipton; T. McLEMORE, Nevada.
Treasurer: J. FRANKLIN WELCH, Salisbury.

### Medical Section.

Chairman: E. E. GILMORE, Adrian. Secretary: W. R. PATTERSON, Tipton.

### Surgical Section.

Chairman: PAUL Y. TUPPER, St. Louis. Secretary, WILLARD BARTLETT, St. Louis.

### Eye, Ear, Nose and Throat Section.

Chairman: J. H. THOMPSON, Kansas City. Secretary, T. McLEMORE, Nevada.

## ORATORS.

### Oration on Medicine:

R. H. GOODIER, Hannibal.

### Oration on Surgery:

F. J. LUTZ, St. Louis.

## COMMITTEES.

### Committee on Scientific Work.

E. E. Gilmore, W. R. Patterson, Paul Y. Tupper, Willard Bartlett, J. H. Thompson, T. McLemore.

### Publication Committee.

W. B. Dorsett, Chairman; M. B. Clopton, M. C. Shelton.

### Committee on Public Policy and Legislation.

H. E. Pearse, Chairman; R. M. Funkhouser, F. R. Newberry.

### Defense Committee.

F. J. Lutz, Chairman; W. B. Dorsett, Joseph Grindon.

### Committee on Medical Education.

B. M. Hypes, Chairman; C. M. Jackson, O. B. Campbell.

### Committee on Tuberculosis.

E. W. Schauffler, Chairman; Geo. Homan, J. R. Lemen, W. E. McKinley, J. R. Boyd.

### Missouri Society of Medical Secretaries.

President, Foster W. Burke, Laclede; First Vice-President, M. A. Smith, Gallatin; Secretary-Treasurer, Chas. Wood Fassett, St. Joseph.

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Twenty-sixth District.—Councillor, R. L. Johnson, Rolla. Counties: Crawford, Phelps, Pulaski, Laclede, Dent, **Dallas.**

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Twenty-ninth District.—Councillor, A. R. Snyder, Joplin. Counties: McDonald, Newton, Jasper, Cedar, **Dade.**

***Counties in black are not organized.**

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| Reynolds | J. M. Lowrey | Centerville | T. W. Chilton | Corridon. |
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| Saline | D. C. Gore | Marshall | A. E. Gore | Marshall. |
| St. Charles | J. R. Mudd | St. Charles | B. K. Stumberg | St. Charles. |
| St. Clair | R. J. Smith | Johnson City | Ruth Seevers | Osceola. |
| St. Francois | T. L. Haney | Farmington | R. Applebery | Leadwood. |
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| Schuyler | E. L. Mitchell | Lancaster | H. E. Gerwig | Downing. |
| Scotland | W. E. H. Bondurant | Memphis | W. E. Alexander | Memphis. |
| Scott | W. H. Wescoat | Oran | W. S. Hutton | Fornfelt. |
| Shelby | J. D. Smith | Shelbina | A. M. Wood | Lentner. |
| Stoddard | Edward Moore | Bloomfield | John Ashley | Bloomfield. |
| Sullivan | J. C. Kessinger | Milan | J. S. Montgomery | Milan. |
| Taney | Chas. W. Burdett | Branson | Elizabeth McIntyre | Branson. |
| Vernon | J. F. Robinson | Nevada | T. McLemore | Nevada. |
| Warren | W. J. Alexander | Marthasville | E. A. Fluesmeier | Wright City. |
| Washington | J. A. Eaton | Belgrade | W. S. Smith | Belgrade. |
| Wayne | J. P. Sebastain | Patterson | R. J. Owens | Mill Spring. |
| Webster | H. Highfill | Marshfield | Wm. R. Beatie | Marshfield. |
| Worth | W. A. Robertson | Denver | J. K. Phipps | Grant City. |